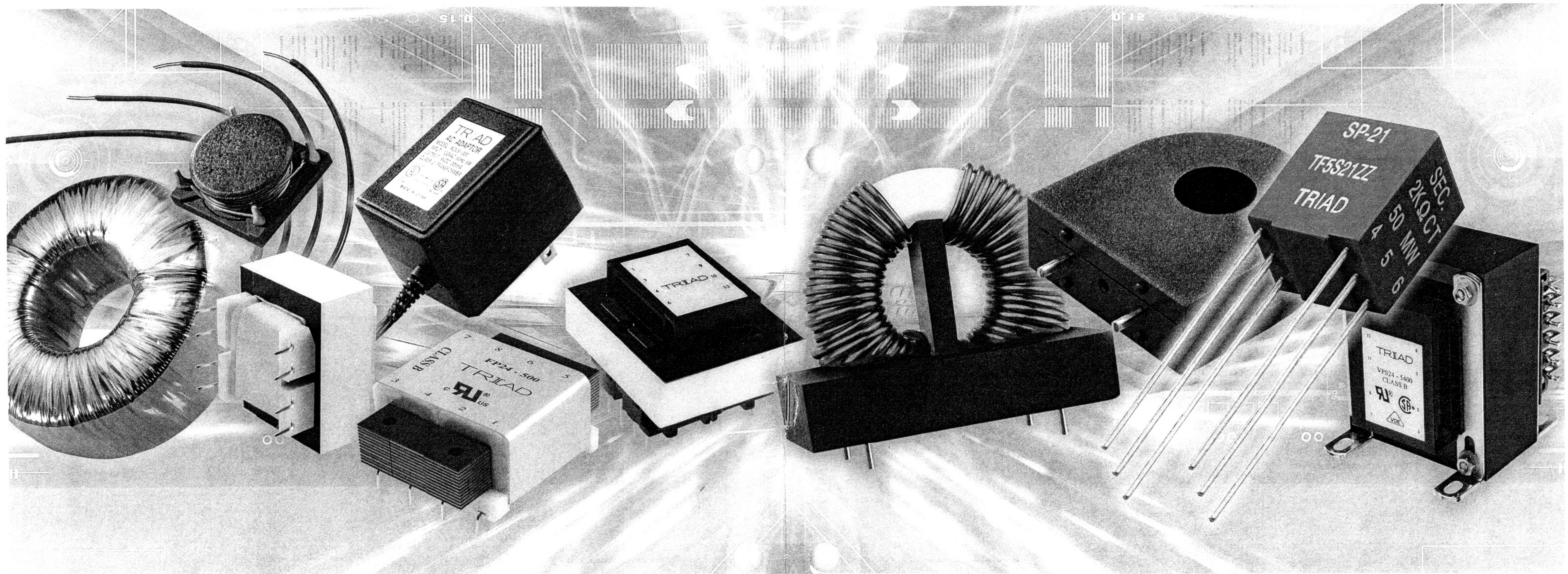


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# TRIAD



# TRIAD

www.TriadMagnetics.com  
22520 B Temescal Canyon Road, Corona, CA 92883  
Phone 951-277-0757 | FAX 951-277-2757



Doc 117005

# MAGNETICS CATALOG

If you could look inside the most advanced computers, telecommunication systems, automation controls, audio devices and other equipment -- you would see many of them have something in common. They depend on innovative technology solutions from Triad Magnetics for power conversion, filtering, isolation and more.

For over 60 years, Triad has been an electronics innovator and a leader. Lewis W. Howard founded the company during the 1940s in Venice, California. He was a graduate of UC Berkley, a cofounder of the Wescon Trade Show and was recognized as a life member of IEEE for his contributions to the industry.

In the 1950s, Triad first helped Leo Fender and surf guitarist Dick Dale turn up the volume on amplifiers, which led to the birth of

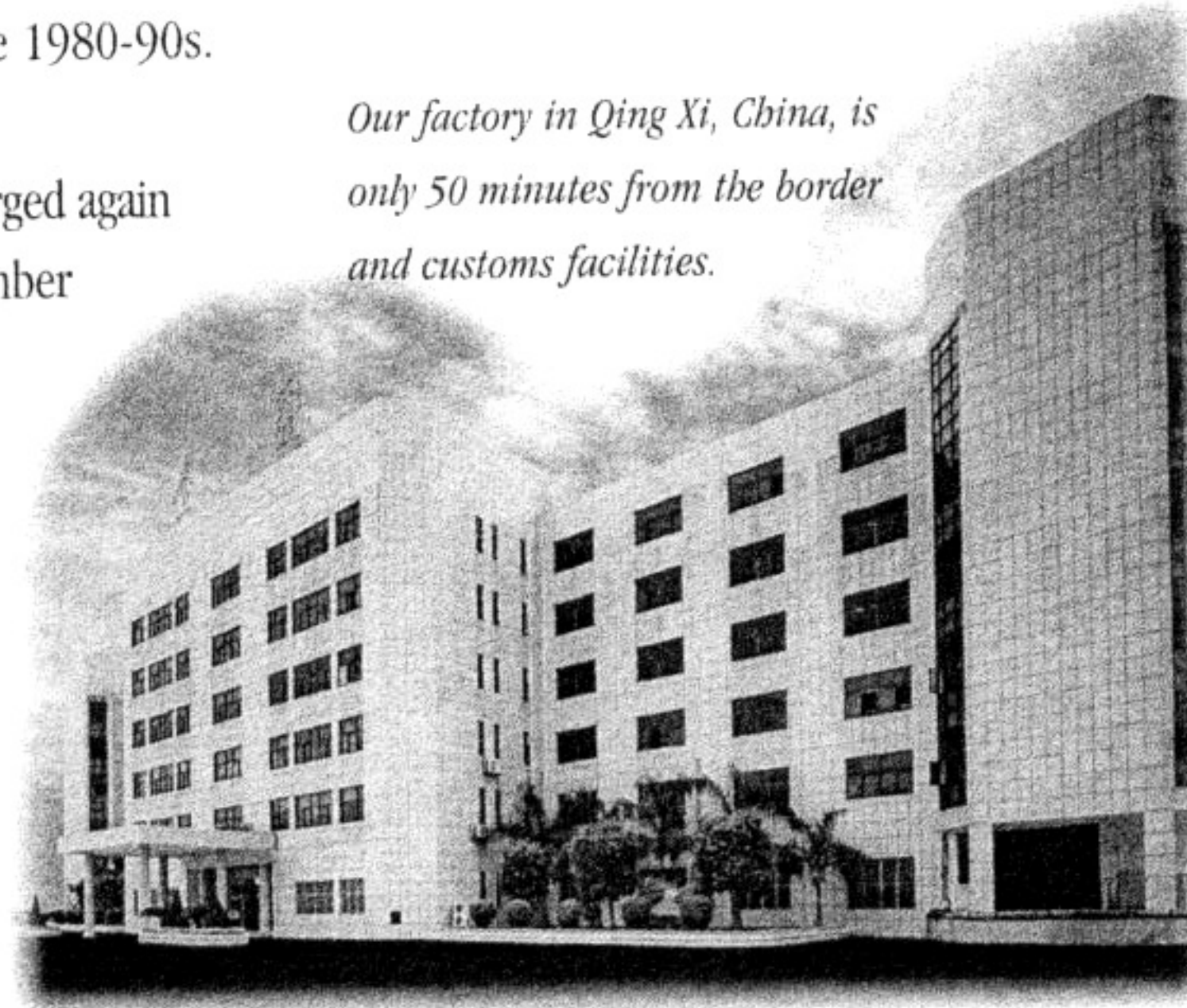
Rock & Roll. Triad was next the dominant supplier to the TV industry in the 1960s. Transformers from Triad also supported the Apollo mission to the Moon, and then the first microwave ovens in the 1970s. The Triad brand played a leading role in the rise of industrial automation and controls, electronic ballasts for lighting systems and innovative medical devices in the 1980-90s.

Today, you'll find Triad has emerged again as an innovative leader after a number of years as a successful division of the Litton, MagneTek and Parallax companies. Triad has returned to its roots in Southern California with a 22,000 square foot modern engineering and service center, which is conveniently located in Corona -- It is a

subsidiary of the Axis Corporation, an electronics industry leader listed on the Taiwan stock market. The company's Taiwanese headquarters facility includes a design center with sophisticated R&D capabilities. Manufacturing facilities are located in Mainland China.

*continued on back cover*

*Our factory in Qing Xi, China, is only 50 minutes from the border and customs facilities.*



## TRIAD MAGNETICS TIMELINE

### 2000s

*Triad opens new Southern California facilities*

### 1990s

*Triad supports advances in computer-based automation & control*

### 1980s

*Triad develops electronic ballasts for smart lighting systems*

### 1970s

*Triad brings home the bacon with microwave ovens*

### 1960s

*Triad joins the race to the moon*

### 1950s

*Triad turns it up with rock & roll amplifiers*

### 1940s

*Triad is founded by Lewis W. Howard*

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### RoHS Compliance

*Triad Magnetics, a recognized leader in the magnetics industry for decades, has once again stepped out in front of the crowd by ensuring all of our catalog products are free of the hazardous materials called out in 2002/95/EC, known as the RoHS Initiative.*

*Please contact us at 951-277-0757 or consult our website at TriadMagnetics.com for any exceptions as well as compliance effective date codes for specific part numbers.*

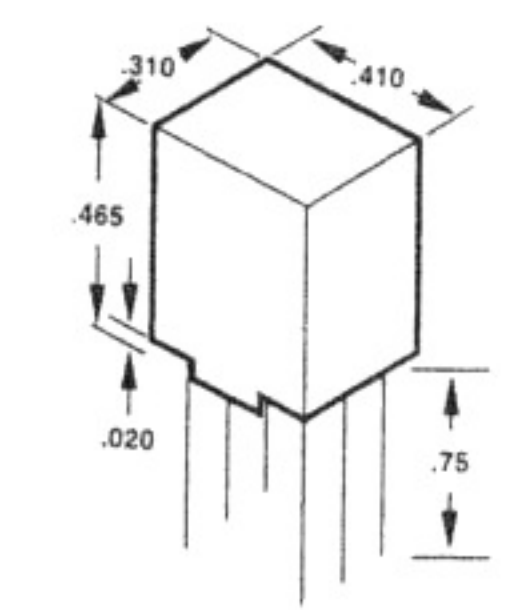
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# Audio Transformers



Triad high reliability audio transformers provide the durability and precision required in today's demanding designs. These transformers are available for a wide variety of applications. The line of Red Spec audio transformers is designed and constructed to meet the rigid requirements of MIL-T-27E. These transformers feature an epoxy molded case, gold plated leads and exceptional operation from 300 Hz to 100 kHz.

Frequency Response Ranges: 300 Hz to 100 kHz

## QUALITY POLICY

Triad's Quality Policy is the total satisfaction of our Customer's expectations. This is achieved by our covenant to the following:

- An unwavering compliance to the requirements of applicable product safety and performance standards (UL, TUV, etc), ISO 9001:2000, drawing specifications and applicable customer requirements.
- The on-going pursuit of continually improving the effectiveness of Triad's Quality Management System.
- The consistent assessment and fulfillment of our Customer's changing needs.



ISO 9001:2000  
Certificate Registration Number  
74 300 2556

Section	Type No.	Mil Type No.	Power Level in mW	Matching Impedance		Max. Ma DC Unbalanced in Primary	DC Resistance		Overall Turns Ratio	Figure No.
				Primary	Secondary		Primary	Secondary		
A	SP-4	TFSS21ZZ	10	200,000 CT	1,000 CT	0.0	5,300.0	100.0	14.1:1.0	3
B	SP-5	TFSS21ZZ	25	50,000 CT	1,000 CT	0.0	3,800.0	75.0	7.1:1.0	3
C	SP-13	TFSS21ZZ	40	25,000 CT/20,000 CT	1,000/800 CT	0.5	1,700.0	115.0	5.0:1.0	3
D	SP-20	TFSS21ZZ	50	10,000 CT	1,200 CT	1.0	1,050.0	200.0	2.88:1.0	3
	SP-21	TFSS21ZZ	50	10,000 CT	2,000 CT	1.0	1,050.0	330.0	2.24:1.0	3
	SP-22	TFSS21ZZ	50	10,000	2,000 CT/500§	1.0	1,050.0	146.0/168.0§	4.48:1.0:1.0	4
	SP-29	TFSS21ZZ	50	10,000 CT	500 CT	1.0	1,050.0	80.0	4:47:1.0	3
	SP-33	TFSS21ZZ	50	1,000	50	3.0	145.0	8.0	4.4:1.0	1
	SP-42	TFSS21ZZ	50	150 CT	12	10.0	18.0	2.7	3.54:1.0	2
	SP-48	TFSS21ZZ	50	7,500 CT	12	1.0	796.0	2.9	25.0:1.0	2
	SP-49	TFSS21ZZ	50	300 CT	600	7.0	41.0	98.0	1.0:1.42	2
	SP-50	TFSS21ZZ	50	500 CT	600	3.0	67.0	98.0	1.0:1.1	2
	SP-51	TFSS21ZZ	50	900 CT	600	4.0	104.0	96.0	1.22:1.0	2
SP-52	TFSS21ZZ	50	1,500 CT	600	3.0	168.0	92.0	1.58:1.0	2	
SP-66	TFSS21ZZ	50	10,000 CT	10,000 CT	1.0	1,000.0	1,300.0	1.0:1.0	3	
SP-67	TFSS21ZZ	50	600 CT	600 CT	3.0	72.0	92.0	1.0:1.0	3	
SP-68	TFSS21ZZ	50	10,000	10,000 CT/2,500§	1.0	1,000.0	565.0/650.0§	2.1:1.0	4	
SP-69	TFSS21ZZ	50	600	600 CT/150§	3.0	72.0	40.0/45.0§	2.0:1.0:1.0	4	
SP-70	TFSS21ZZ	50	600	600	3.0	72.0	92.0	1.0:1.0	1	
E	SP-128	TFSS21ZZ	•	0.1H	•	5.0	15.0	•	•	5
	SP-310	Shield Only								

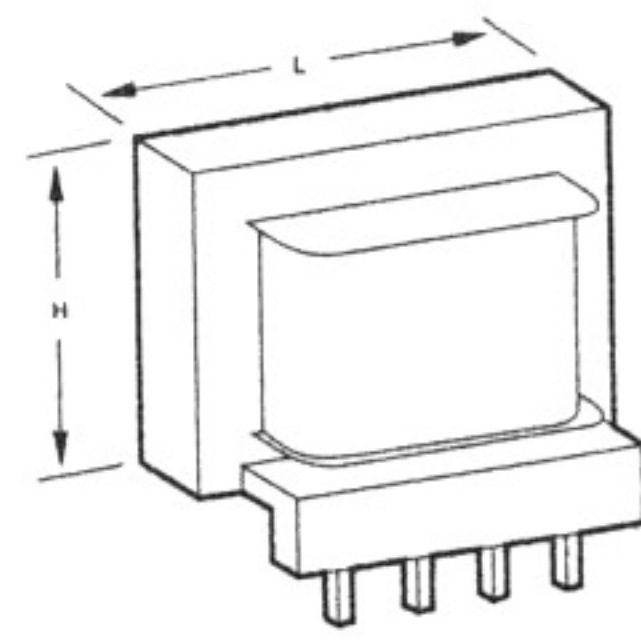
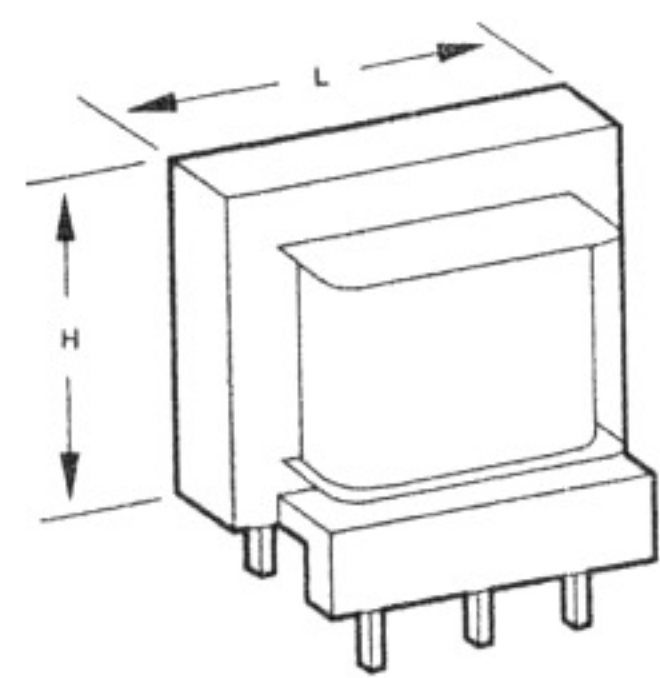
CT = Center Tap § Split secondary

**Technical Notes**

1. Plug-in terminals are precision spaced to provide fixed mounting centers.
2. Red Spec transformers are hi-pot tested at 1,000 VRMS.
3. 150 VDC working voltage.
4. Red Spec transformers feature small footprint base dimensions of .310 by .410 inch.
5. Pin diameter = .020 inch.

# Audio Transformers

## PC Mount



### Description

Triad produces a wide assortment of audio transformers for use in printed circuit designs. These transformers fill a broad application spectrum in the audio industry. Triad audio printed circuit transformers are used in line matching, telephone coupling, pulse trigger, interstage, output, isolation and input applications.

### Specifications

**Frequency Response Ranges:** 200 - 15,000 Hz  
**Impedance Matching:** 10% over frequency range

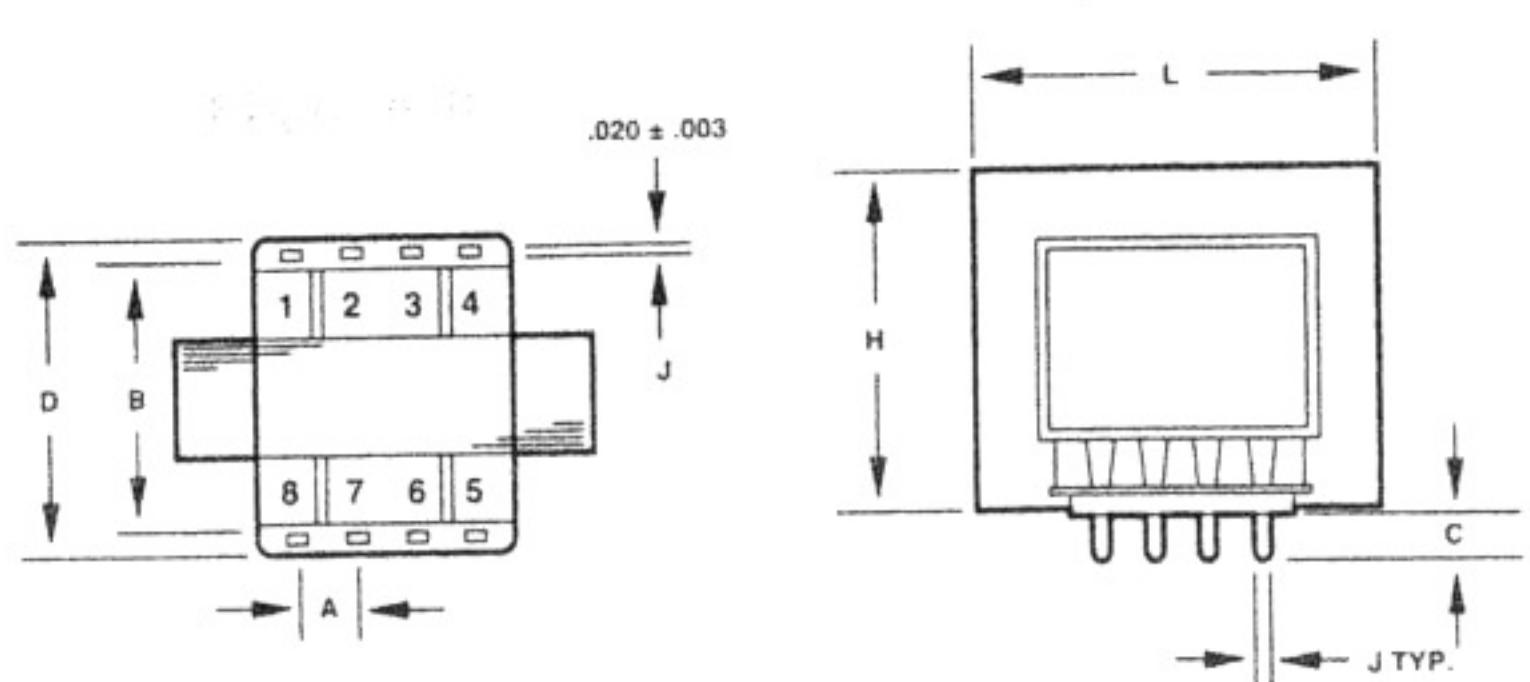
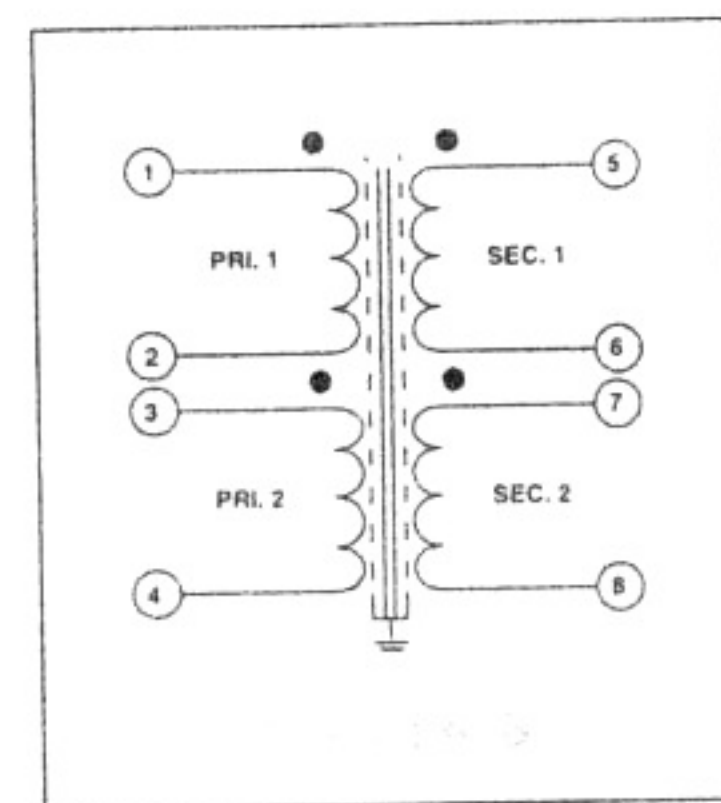
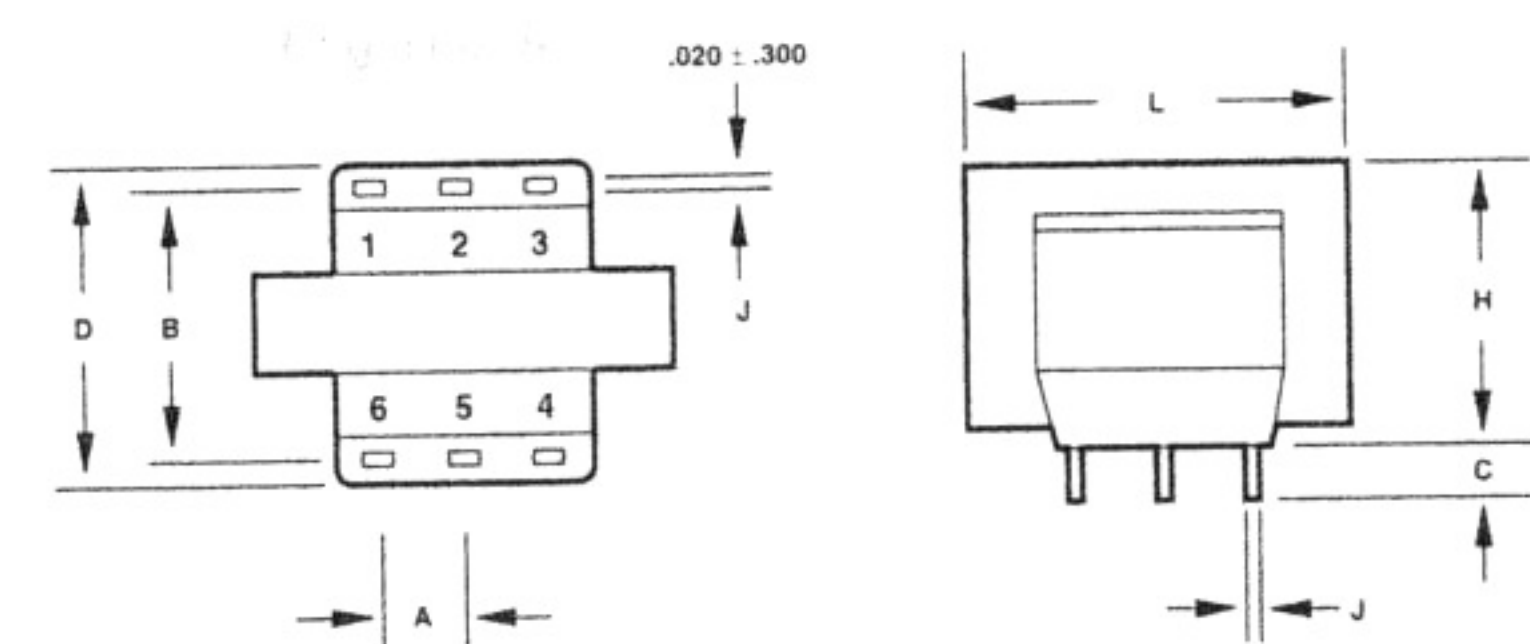
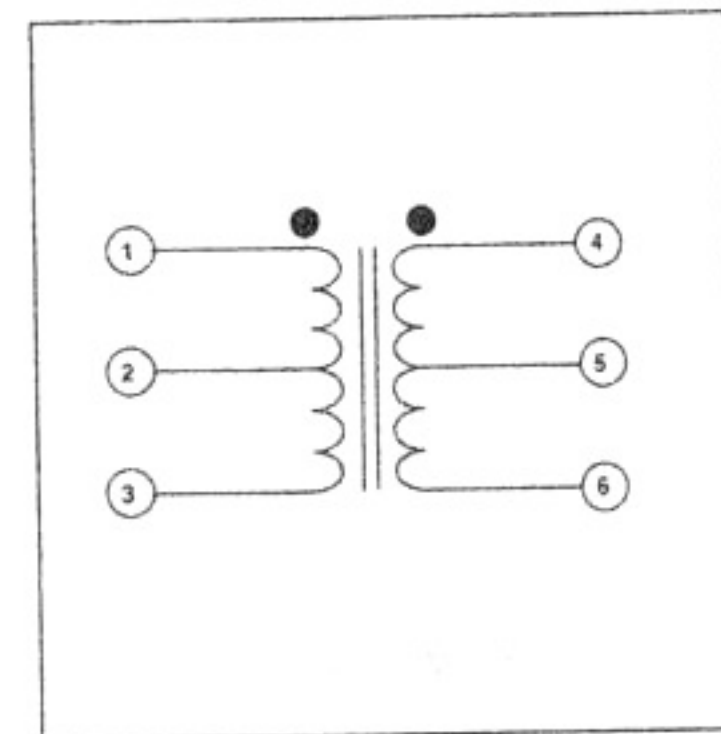
### Plug-in Printed Circuit Audio Transformers

Section	Type No.	Output mW	Primary Impedance	Secondary Impedance	Figure	Pri. DC Unbalance	Dimensions						Wt. Oz.	
							H	D	L	A	B	C		J
A	TY-141P	100	10,000 CT	10,000 CT	A	4 Ma	1/4	1/32	1/16	1/16	7/64	1/16	0.042	.51
	TY-142P	100	10,000 CT	2,000 CT	A	4 Ma	1/4	1/32	1/16	1/16	7/64	1/16	0.042	.51
	TY-144P	100	15,000 CT	15,000 CT	A	4 Ma	1/4	1/32	1/16	1/16	7/64	1/16	0.042	.51
	TY-145P	100	600 CT	600 CT	A	15 Ma	1/4	1/32	1/16	1/16	7/64	1/16	0.042	.51
	TY-146P	1 Watt	600 CT/150§	600 CT/150§	B	.	1 1/4	1 1/4	1 1/4	1/4	1 1/2	1/4	0.042	3.0

§ Split winding CT = Center Tap

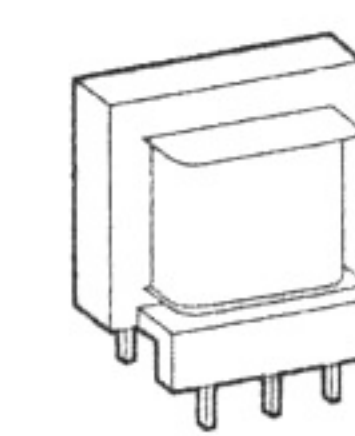
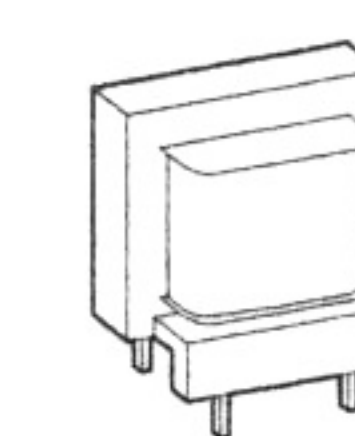
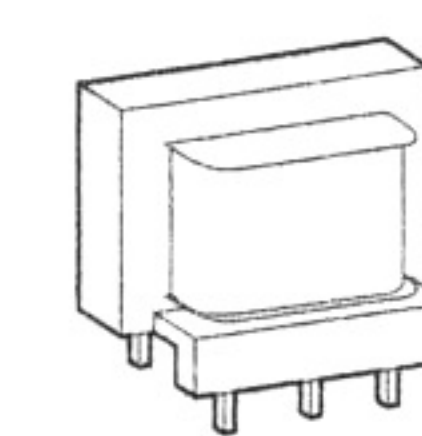
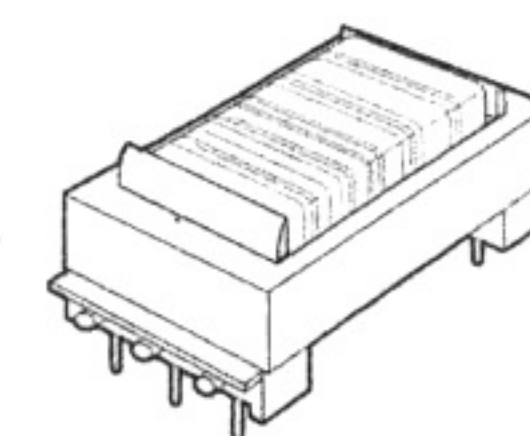
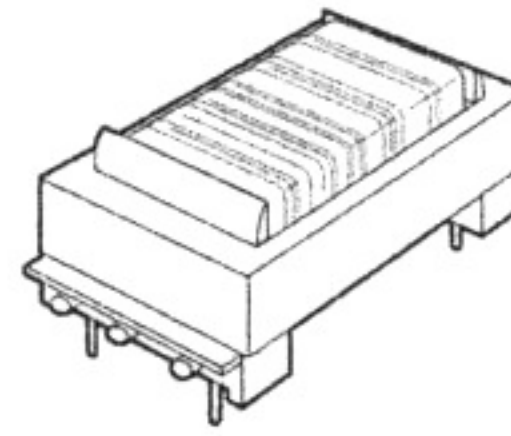
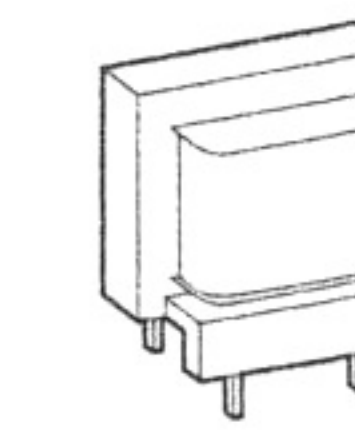
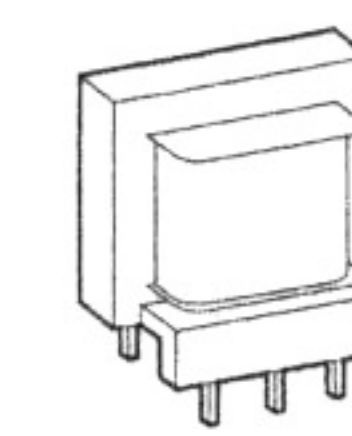
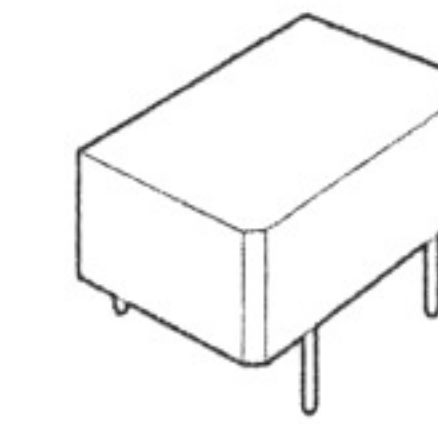
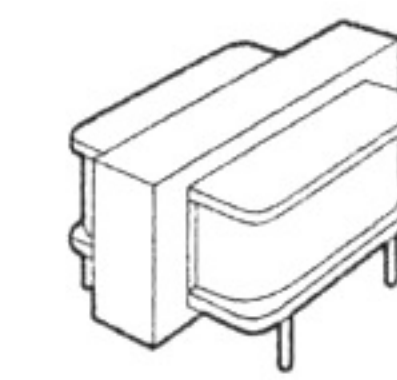
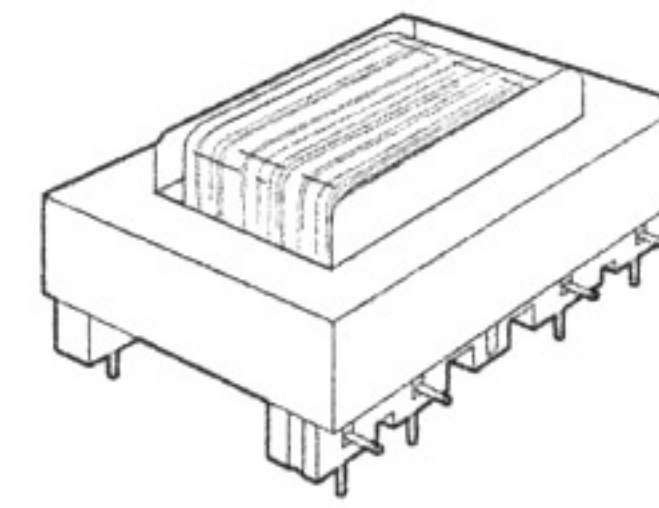
### Technical Notes

1. Plug-in terminals are spaced to provide fixed mounting centers.



# Audio Transformers

## Data/Voice



### Description

Triad telecommunications transformers are designed to meet the requirements for access over leased private lines or through the dial-switched telephone network. The TY series transformers are used for a variety of applications including impedance matching, isolation, repeat coil, line balancing, bridging, and hybrid circuits.

### Specifications

**Designed to meet FCC Part 68**  
**Longitudinal Balance:** (FCC 68.310) - 60 dB min. 200 - 1,000 Hz  
 45 dB min. 1,000 - 4,000 Hz  
**Dielectric Strength:** (FCC 68.304) - 1,500 V  
**Power Level:** -45 dBm to +7 dBm  
**Frequency Range:** Data / Voice = 300 to 3,500 Hz  
 Data = 800 to 3,500 Hz

### Data/Voice Coupling Transformers

Section	Type No.	Impedance (Ohms)		Max. DC Current (mA)	Typ. Insertion Loss (dB)	Typ. Return Loss (dB)	Typ. Freq. Response (dB)	Schematic	Figure
		Pri.	Sec.						
A	TY-305P	600	600	100	1.5	10	±5	1	A
B	TY-306P	600 Split	600	75	1.5	10	±5	2	A
C	TY-307P	600	600	0	1.0	26	±5	3	B
D	TY-310P	600	600	0	1.0	26	±5	3	C
E	TY-311P	600	600	0	1.0	26	±5	3	E
F	TY-304P	600 CT	600 CT	0	1.0	26	±5	4	D
G	TY-301P	600	900	0	1.0	26	±5	5	E
H	TY-303P	4000	600	0	1.0	26	±5	6	E

CT = Center Tap

### Data/Voice Single Transformer

Section	Type No.	Impedance (Ohms)		Max. DC Current (mA)	Typ. Insertion Loss (dB)	Typ. Return Loss (dB)	Typ. Freq. Response (dB)	Schematic	Figure
		Pri.	Sec.						
I	TY-400P	600	600	90	1.75	15	±5	3	I
J	TY-401P	600 CT	600 CT	90	1.75	15	±5	4	J
K	TY-402P	600	600	90	1.75	13	±5	7	F
L	TY-403P	600	600 Split	90	1.75	13	±5	8	G

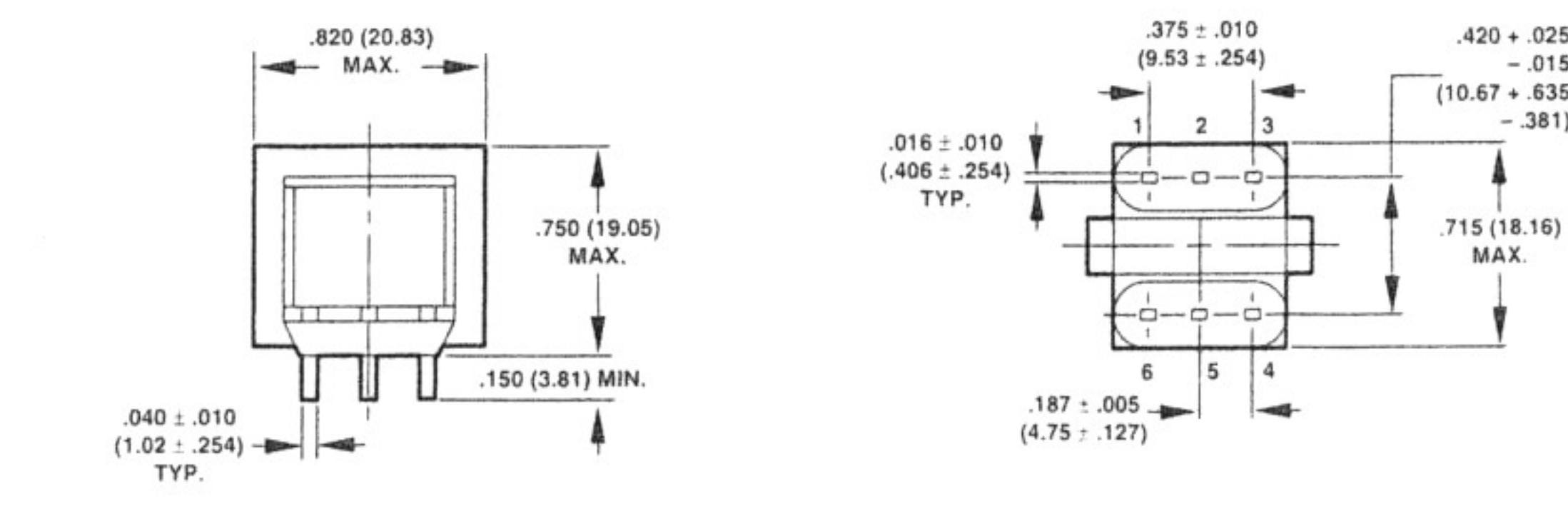
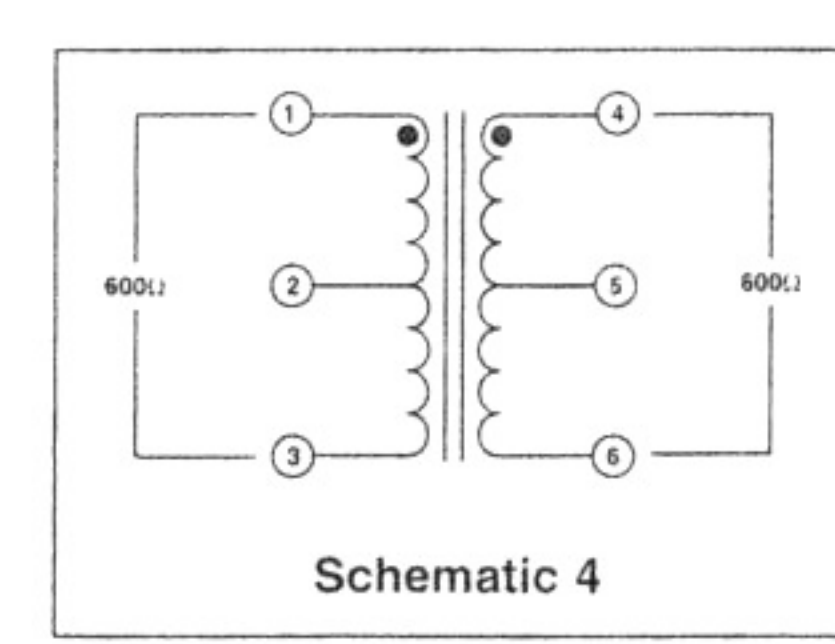
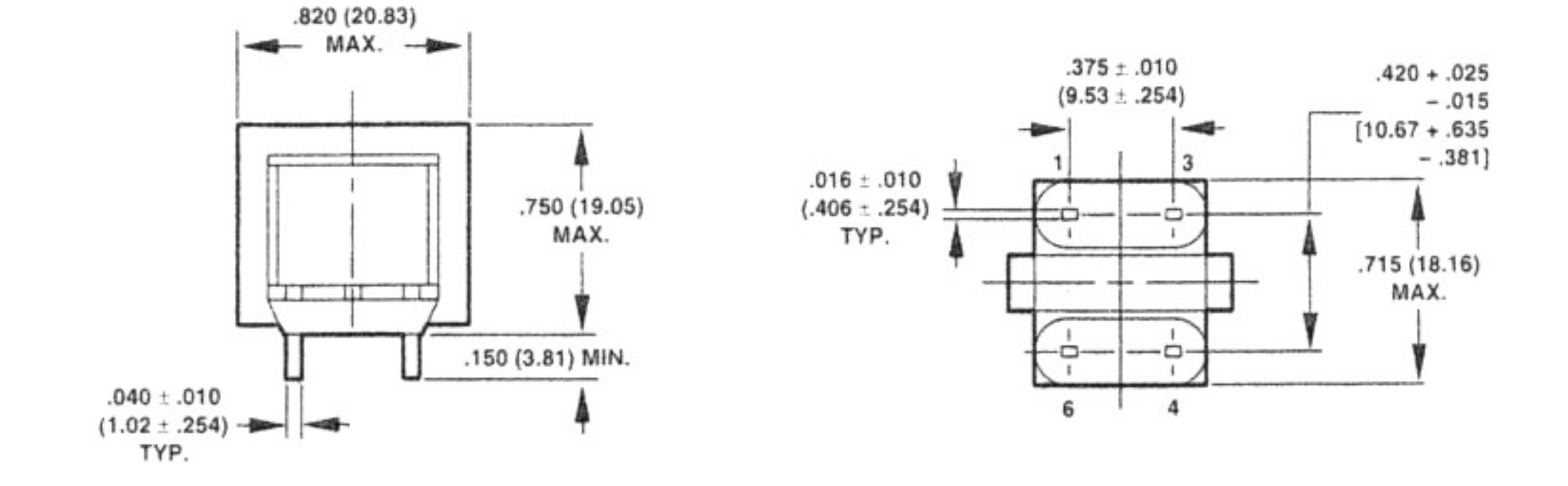
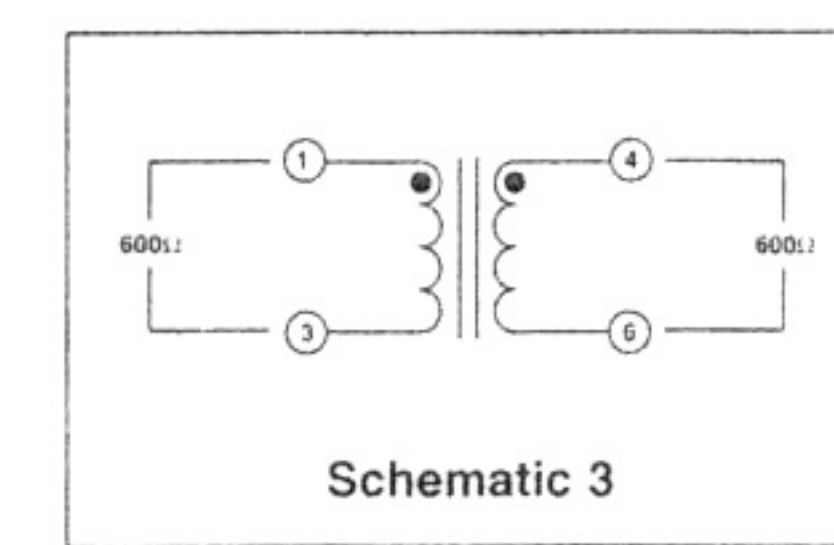
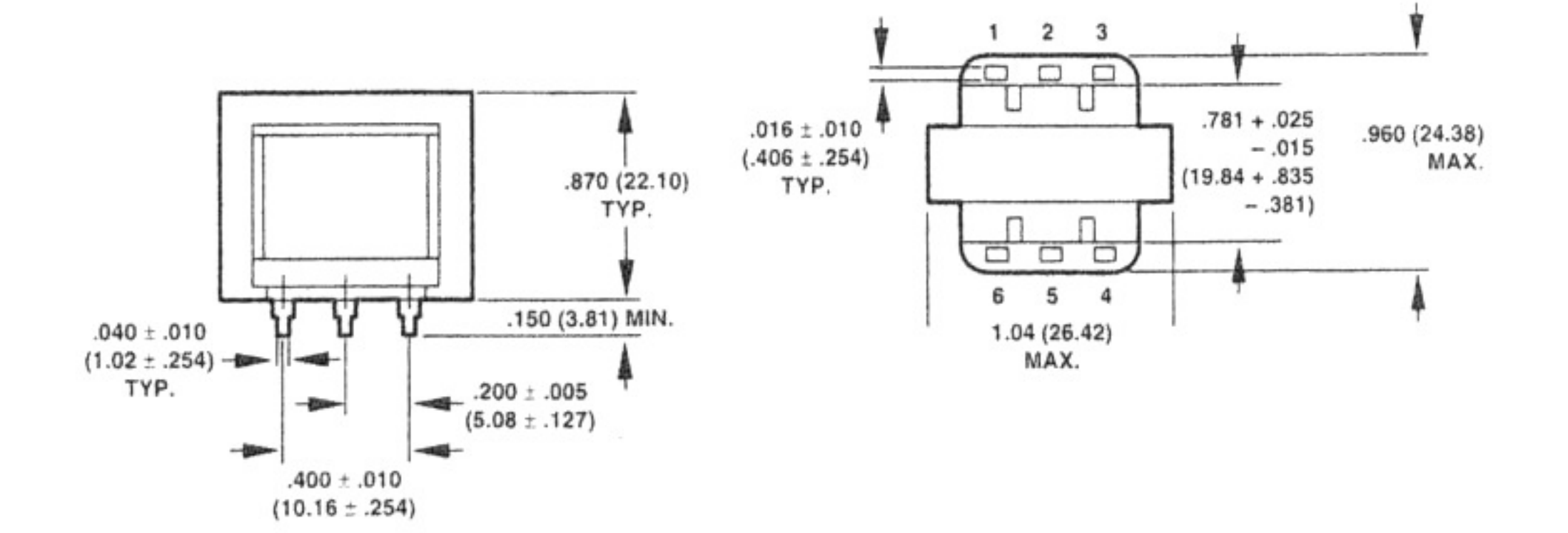
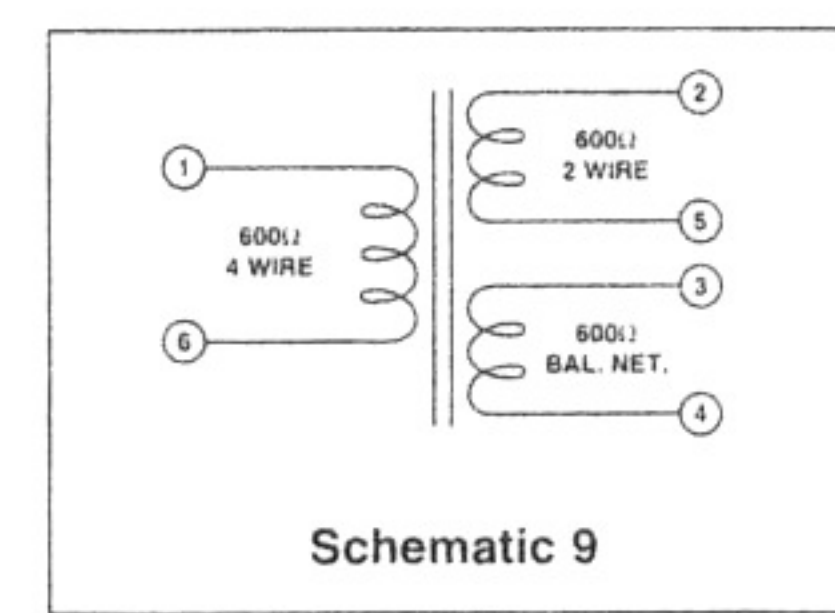
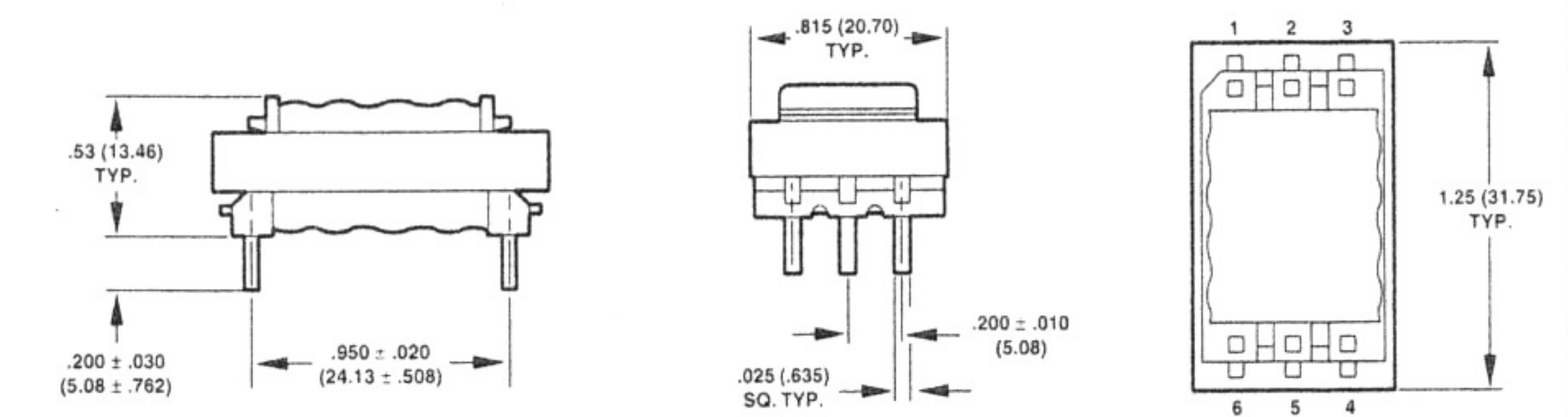
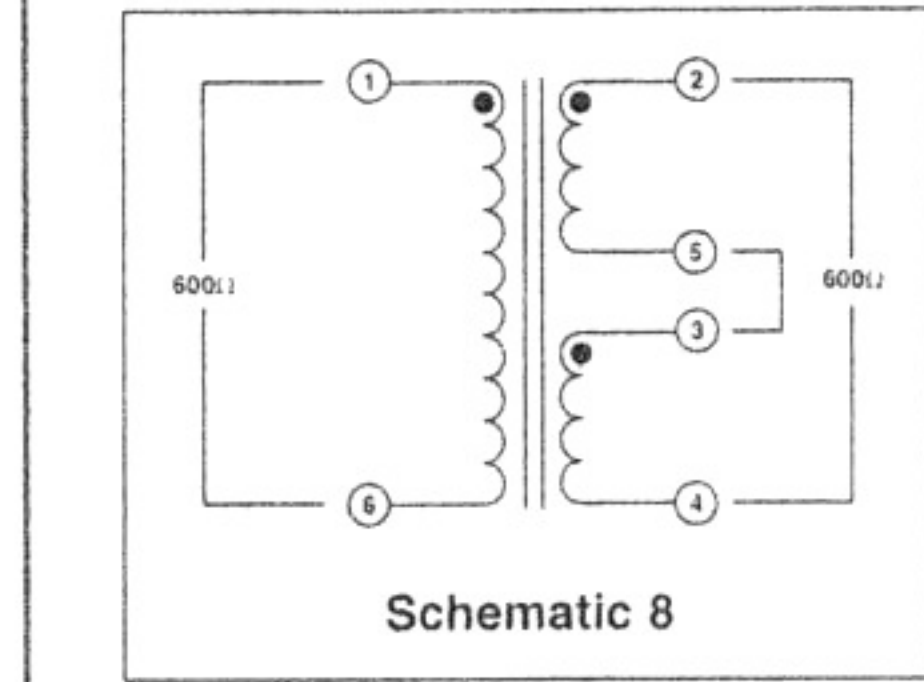
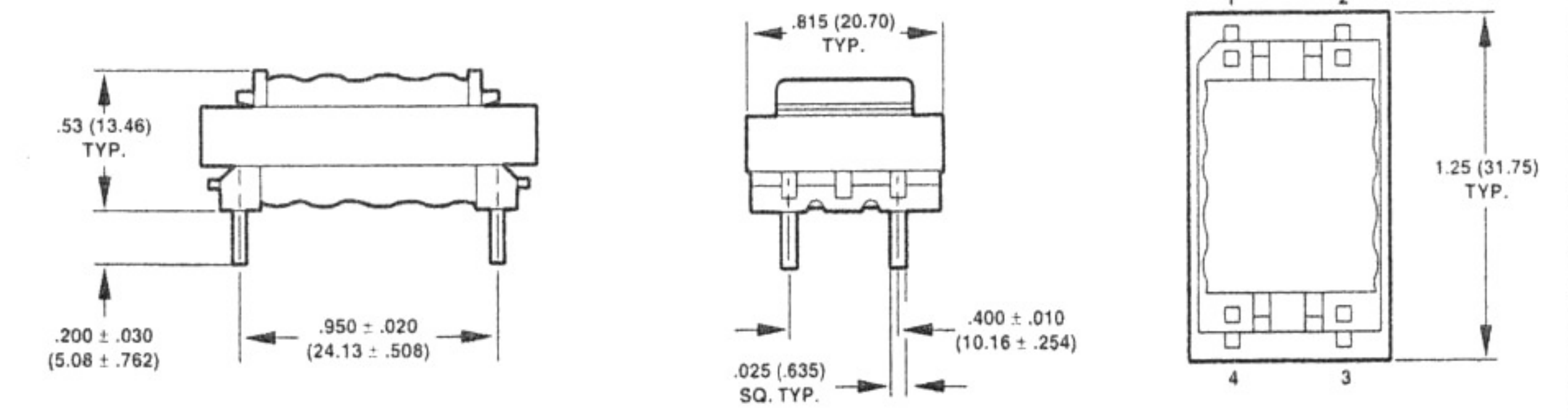
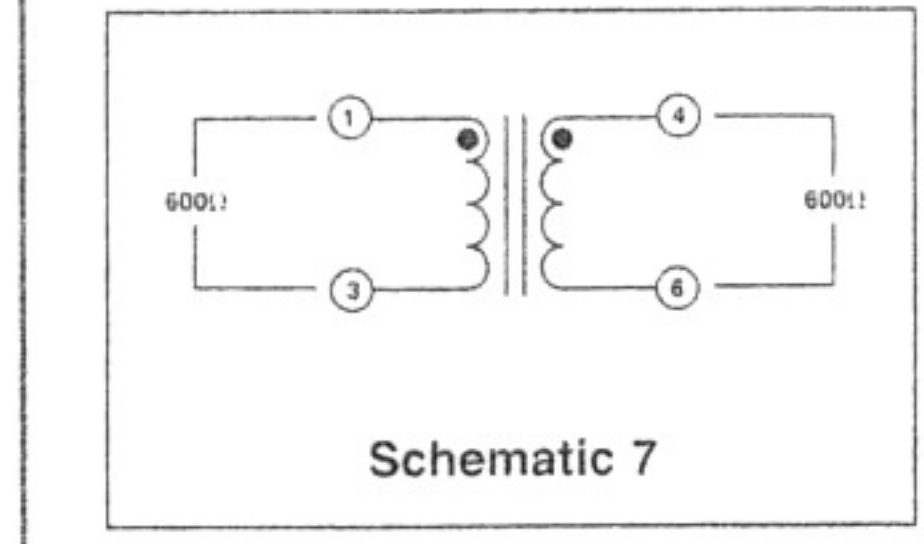
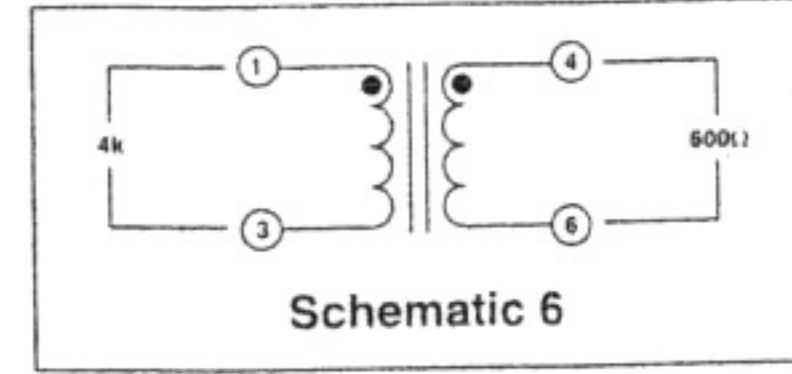
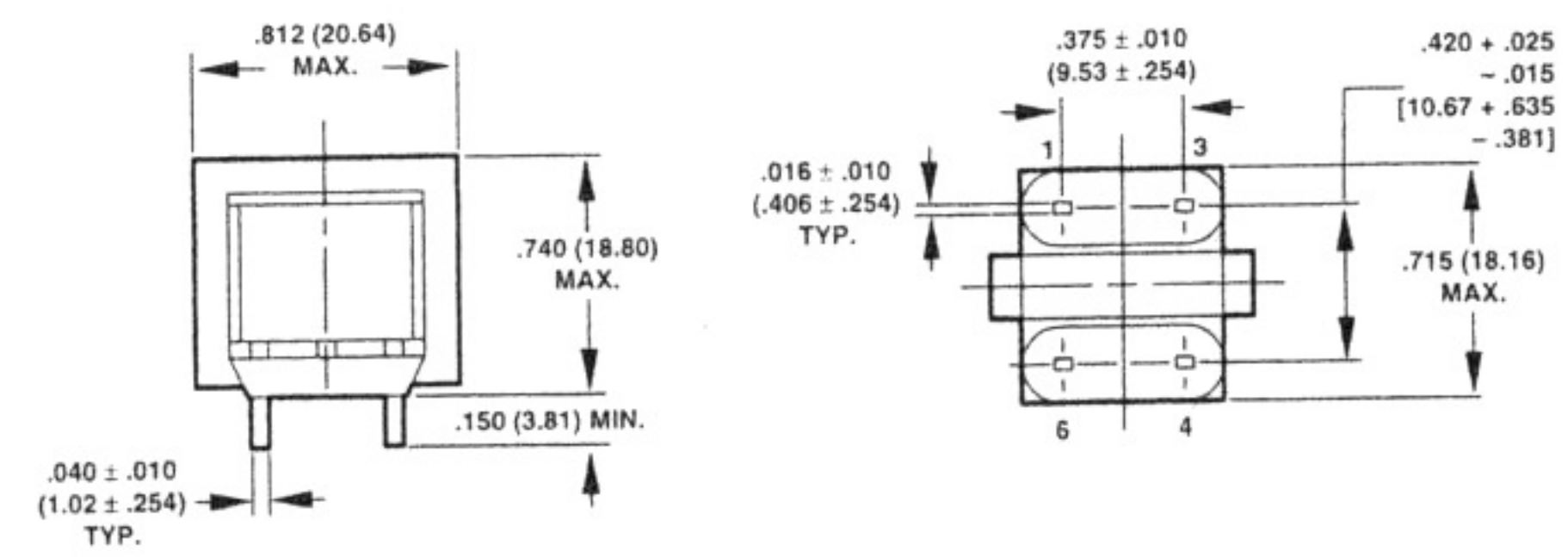
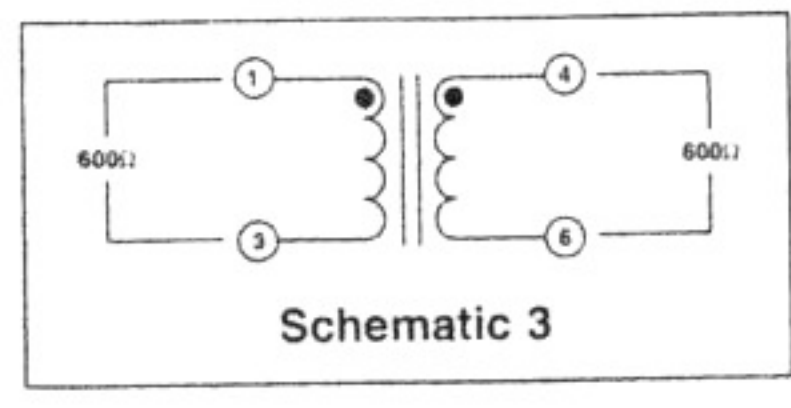
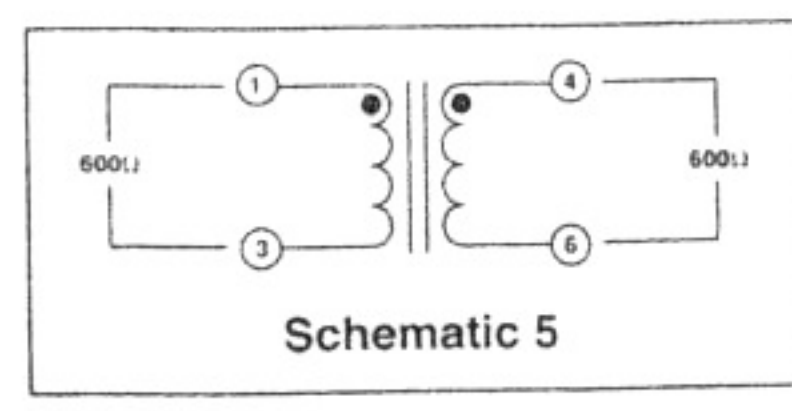
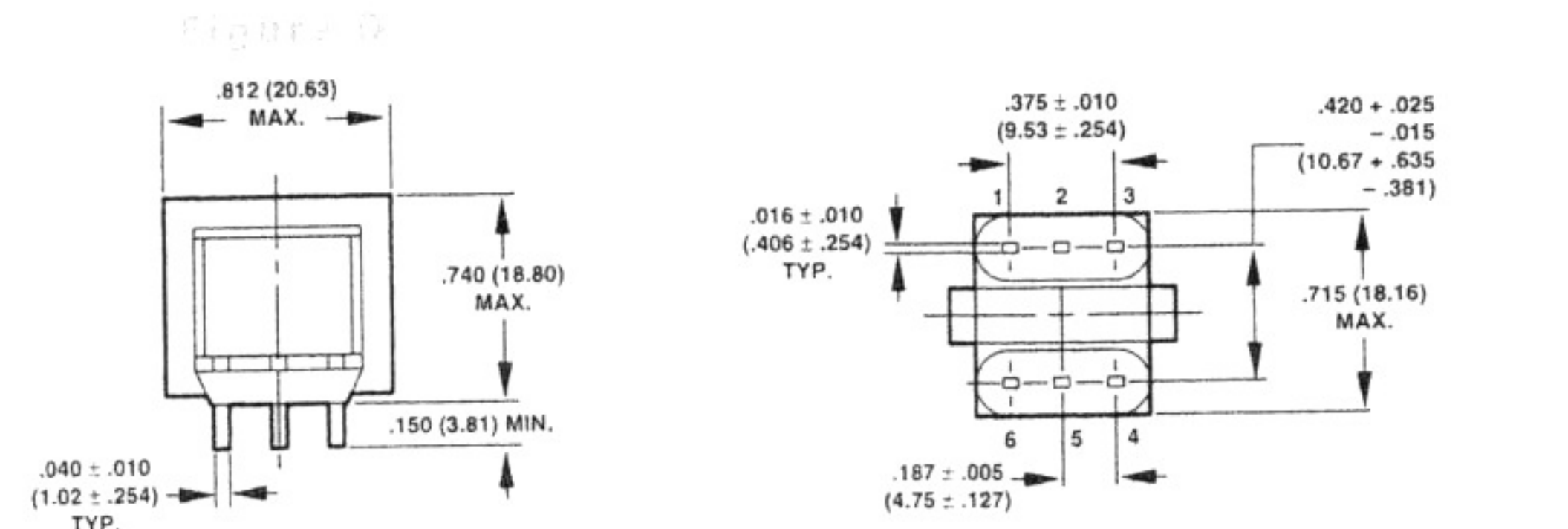
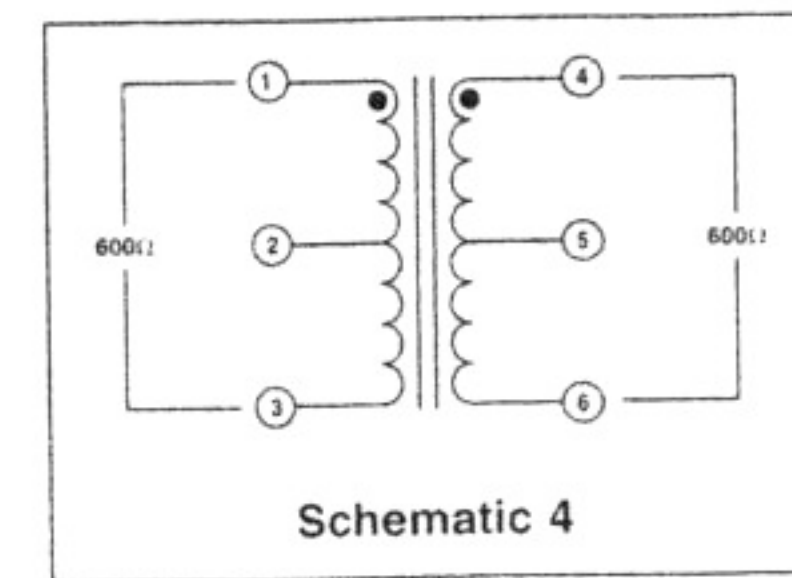
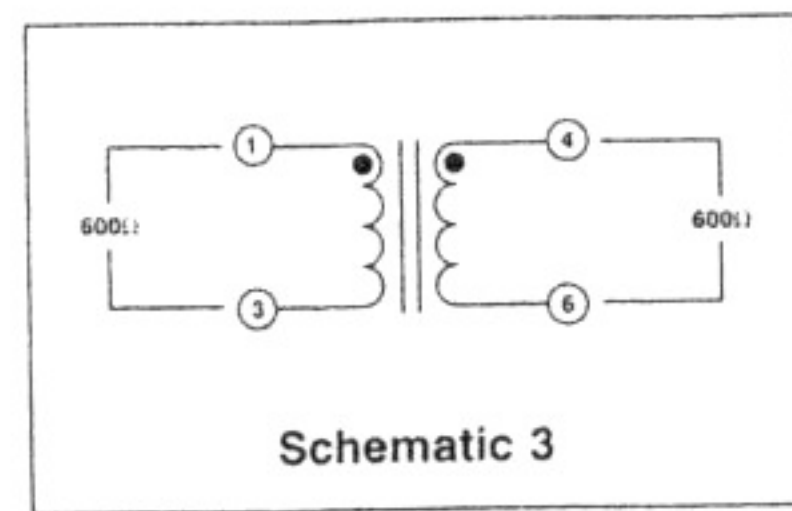
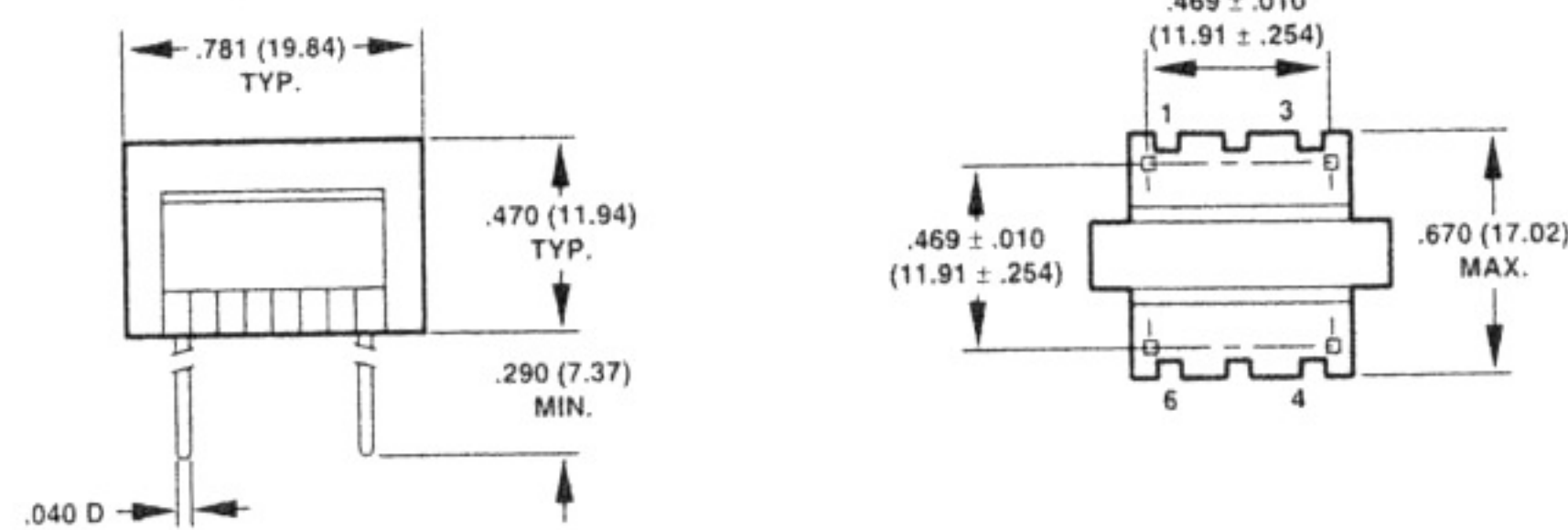
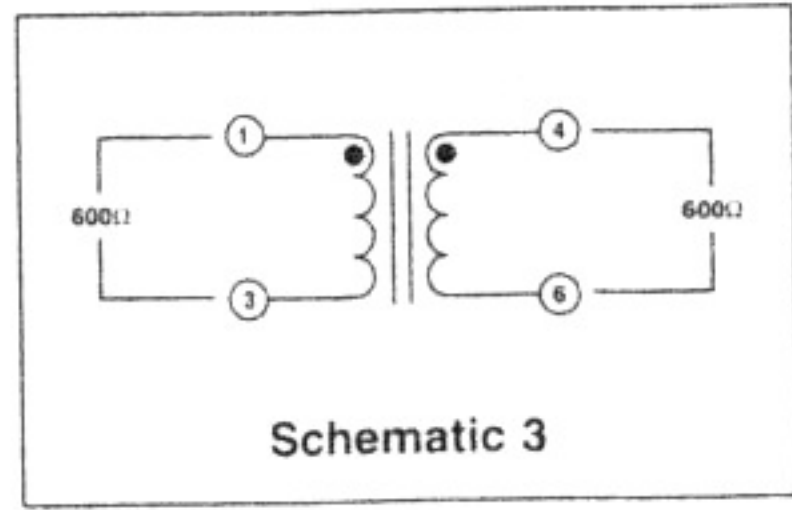
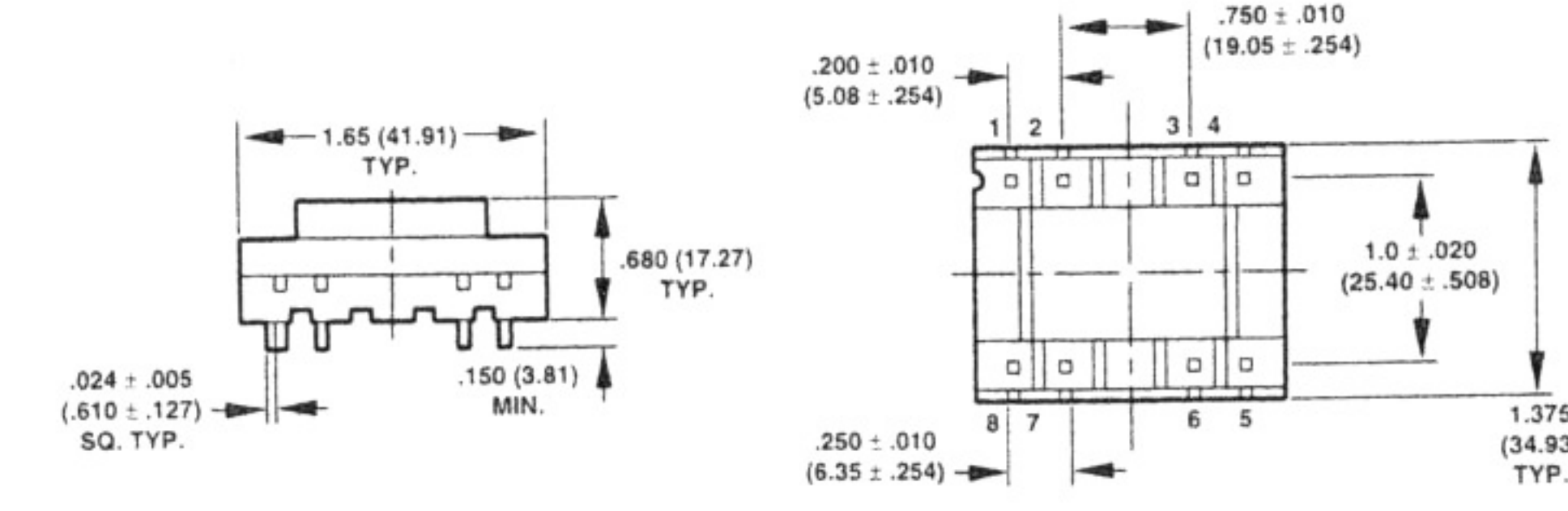
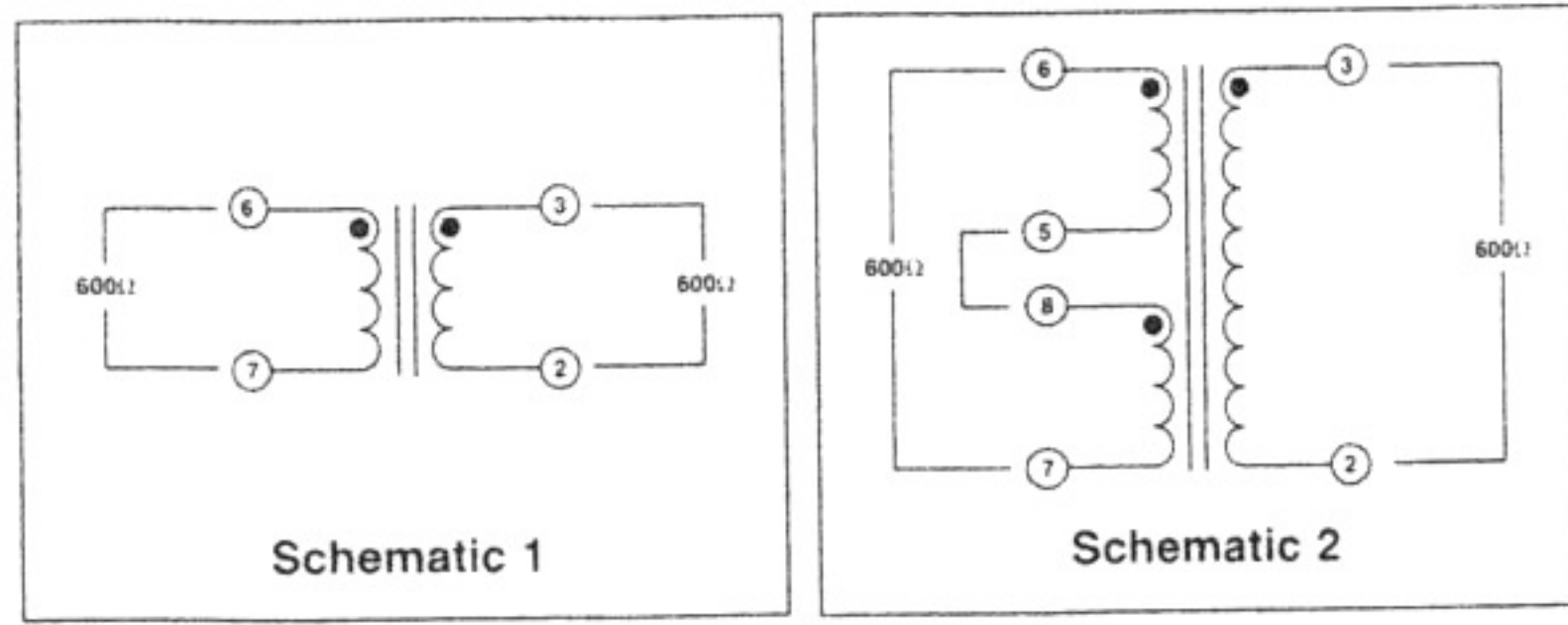
CT = Center Tap

### Data/Voice Single Transformer

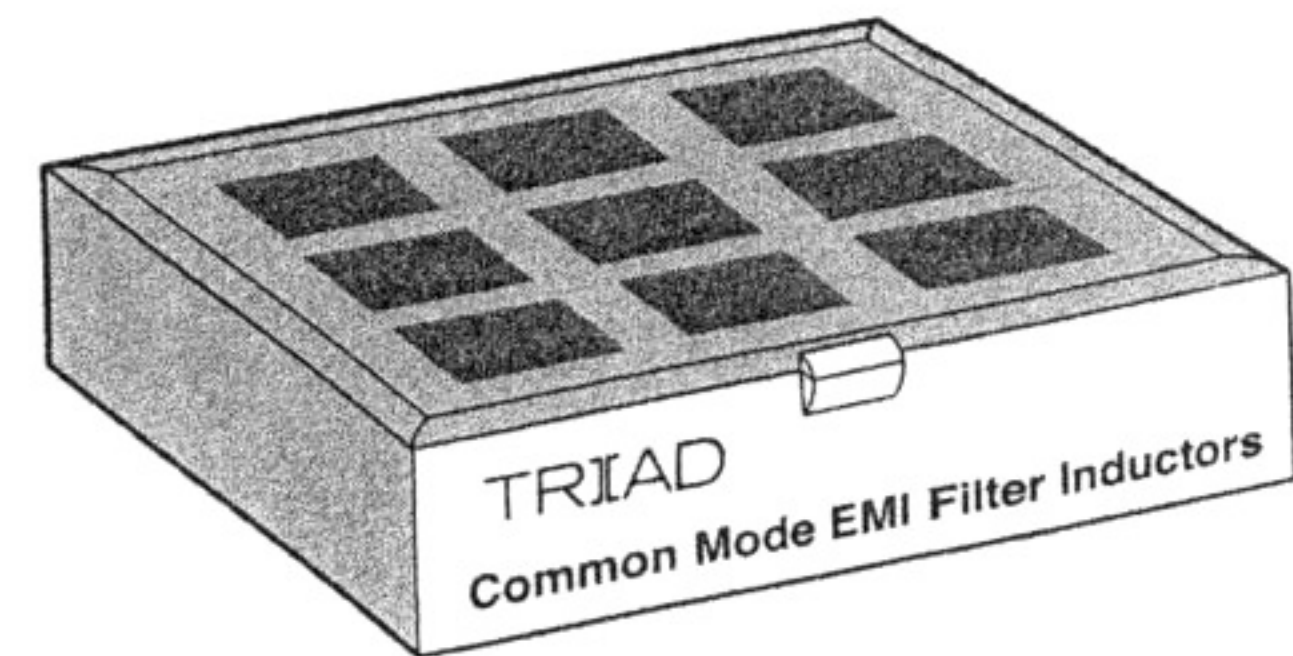
Section	Type No.	Impedance (Ohms)		Max. DC Current (mA)	Typ. Insertion Loss (dB)	Typ. Return Loss (dB)	Trans-Hybrid Loss (dB)	Schematic	Figure
		Pri.	Sec.						
M	TY-300P	600 (4W)	600/600	0	.80	30	50	9	D
N	TY-302P	600 (4W)	600/600	0	.65	32	55	9	H

Technical Notes

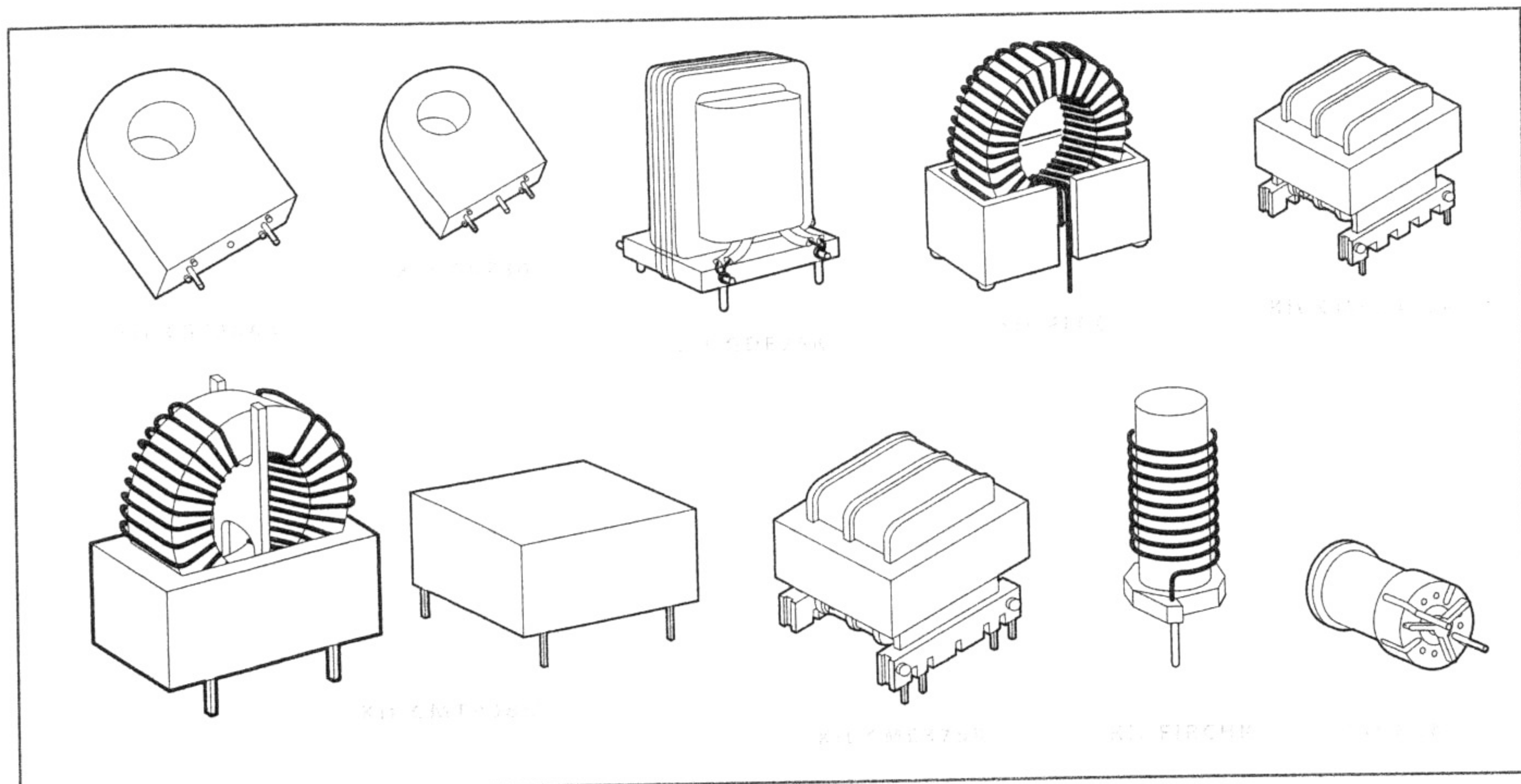
Primary connections shown on left side of schematics.



# Sample Kits



These kits contain representative samples of all our high frequency inductors and transformers organized by product type. The kits include all values, packaging styles and sizes available as standard products within that product series. They are useful for a variety of developmental needs including circuit simulation, circuit testing, prototyping and agency evaluation. All items carry appropriate agency approvals and meet specifications listed in the catalog section referring to the product (see page notation accompanying the kit for individual product specifications). The kits are housed in an easy to see, easy to store clear polycarbonate box with a convenient snap closing hinged lid. Call your Triad representative for details.

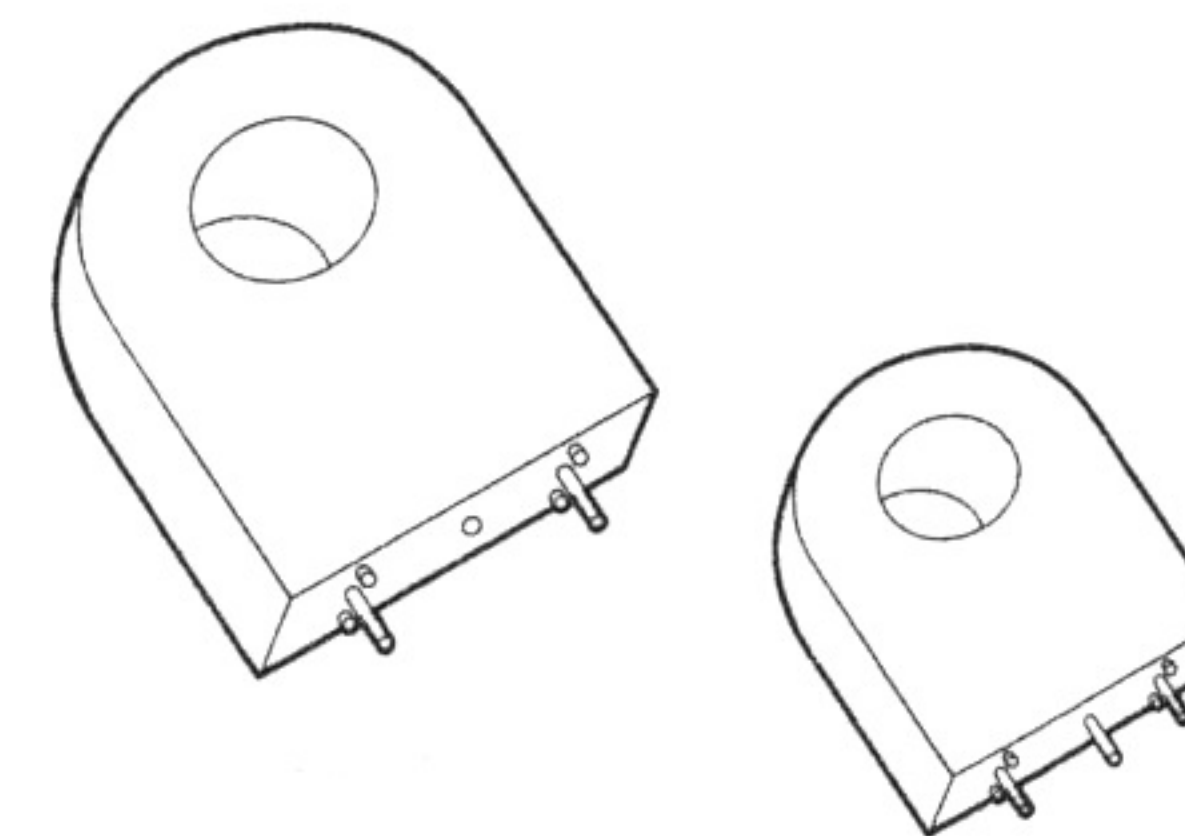


Kit CST206K Contains	Kit CST306K Contains	Kit GDE25K Contains	Kit FITK Contains	Kit CME2425K Contains	Kit CMT908K Contains	Kit CME375K Contains	Kit FIRCHK Contains	Kit RCK Contains	
CST206-1A	CST306-1A	GDE25-1	FIT44-1	FIT80-1	CME2425-1	CMT908-V1	CME375-1	FIRCH-1	RC-1
CST206-1T	CST306-1T	GDE25-2	FIT44-2	FIT80-2	CME2425-2	CMT908-V2	CME375-2	FIRCH-2	RC-2
CST206-2A	CST306-2A	GDE25-3	FIT44-3	FIT80-3	CME2425-3	CMT908-V3	CME375-3	FIRCH-3	RC-3
CST206-2T	CST306-2T	GDE25-4	FIT44-4	FIT80-4	CME2425-4	CMT908-V4	CME375-4	FIRCH-4	RC-4
CST206-3A	CST306-3A	GDE25-5	FIT80-5	FIT80-5	CME2425-5	CME375-5	CME375-5	FIRCH-5	RC-5
CST206-3T	CST306-3T	GDE25-6	FIT80-6	FIT80-6	CME2425-6	CMT908-H1	CME375-6	FIRCH-6	RC-6
			FIT50-1	FIT50-1	CME2425-7	CMT908-H2	CME375-7		RC-7
			FIT50-2	FIT50-2	CME2425-8	CMT908-H3	CME375-8		RC-8
			FIT50-3	FIT50-3	CME2425-9	CMT908-H4	CME375-9		RC-9
			FIT50-4						RC-10
			FIT50-5						RC-11
			FIT50-6						
			FIT50-7						
			FIT68-1						
			FIT68-2						
			FIT68-3						
			FIT68-4						
			FIT68-5						
			FIT68-6						
			FIT68-7						
See Page 13	See Page 13	See Page 21	See Page 19	See Page 15	See Page 15	See Page 15	See Page 20	See Page 18	

# Current Sense Transformers

Designed for switching power supply applications, Triad current sense transformers are used to detect the current passing through a conductor.

These transformers are very reliable and operate effectively over the frequency range of 20 kHz-200 kHz. They are constructed of UL rated 130°C materials. Both models are available with a center tap option.

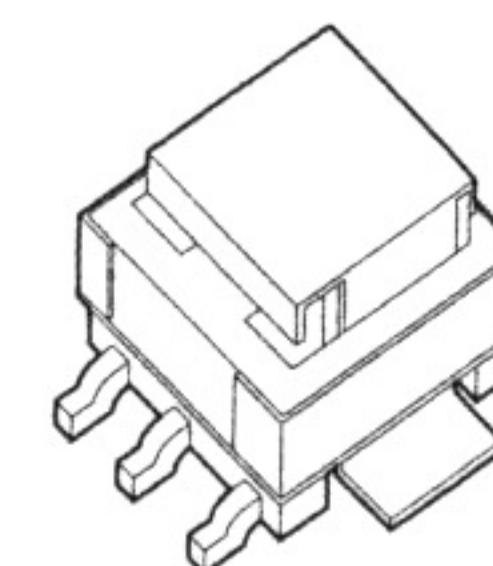
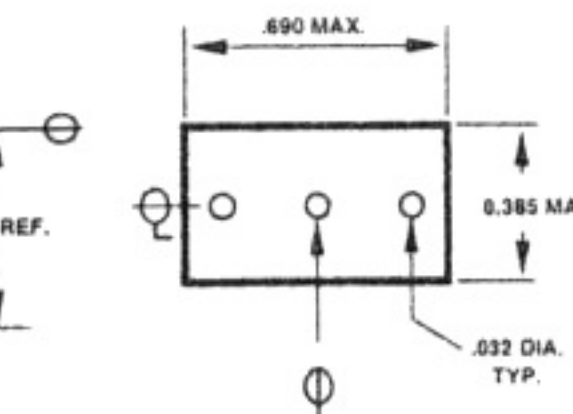
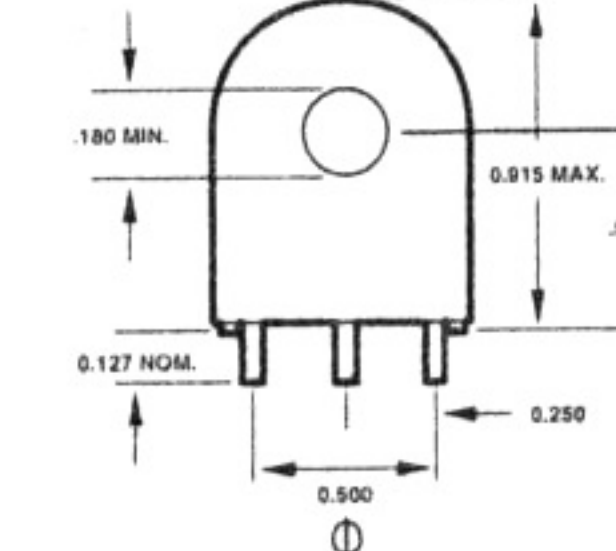
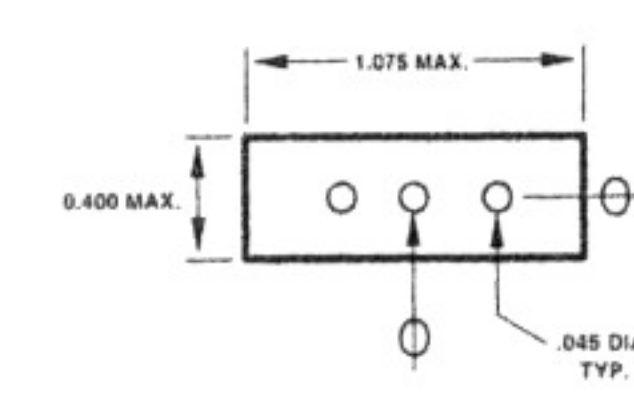
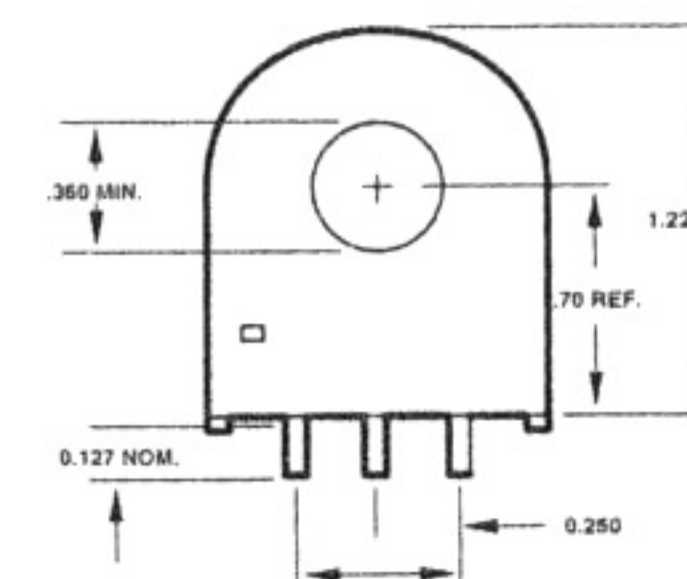


Section/ Figure	Type No.	ET VpSEC REF 20 kHz	Turns Count	Min. Ind. mH	DCR Max. Ohms	Pri. Amps
A	CST206-1A	2000	100	14.0	580	110.0 RMS
B	CST206-1T	2000	100 CT	14.0	580	110.0 RMS
A	CST206-2A	4000	200	56.0	3.500	80.0 RMS
B	CST206-2T	4000	200 CT	56.0	3.500	80.0 RMS
A	CST206-3A	6000	300	130.0	12.400	70.0 RMS
B	CST206-3T	6000	300 CT	130.0	12.400	70.0 RMS
B	CST306-1A	500	50	3.5	340	35.0 RMS
A	CST306-1T	500	50 CT	3.5	580	35.0 RMS
B	CST306-2A	1000	100	14.0	1.550	25.0 RMS
A	CST306-2T	1000	100 CT	14.0	1.550	25.0 RMS
B	CST306-3A	2000	200	55.0	3.750	25.0 RMS
A	CST306-3T	2000	200 CT	55.0	3.750	25.0 RMS

### Technical Notes

1. Derate ET product by 32% for 50 kHz, 52% for 100 Hz and 50% for unidirectional operation.
2. Rated primary current renders approximately 40°C temperature rise.

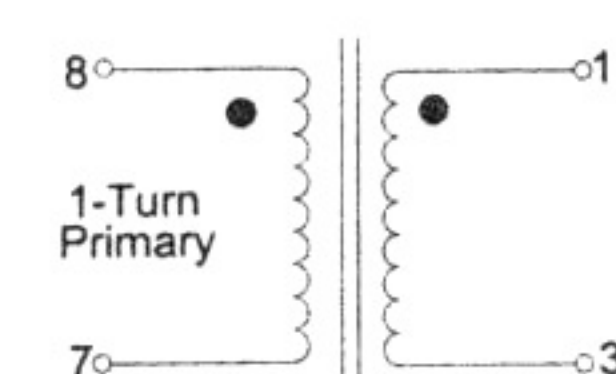
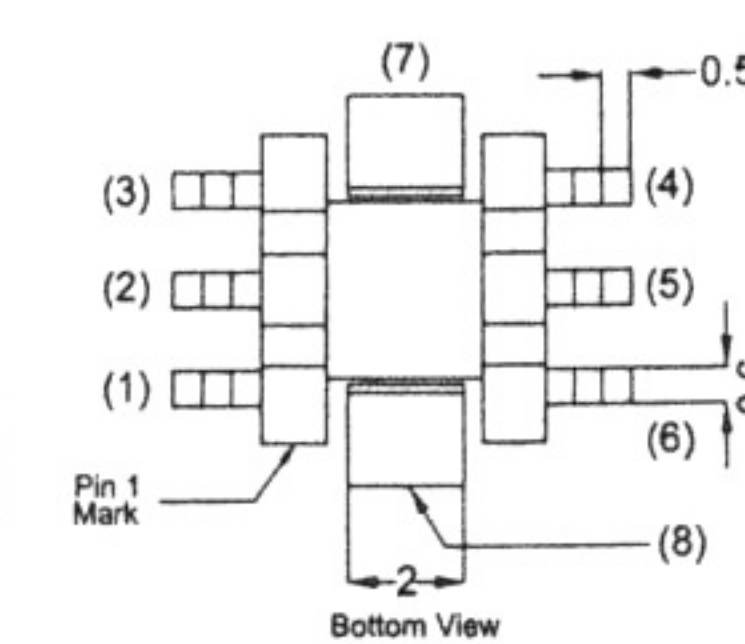
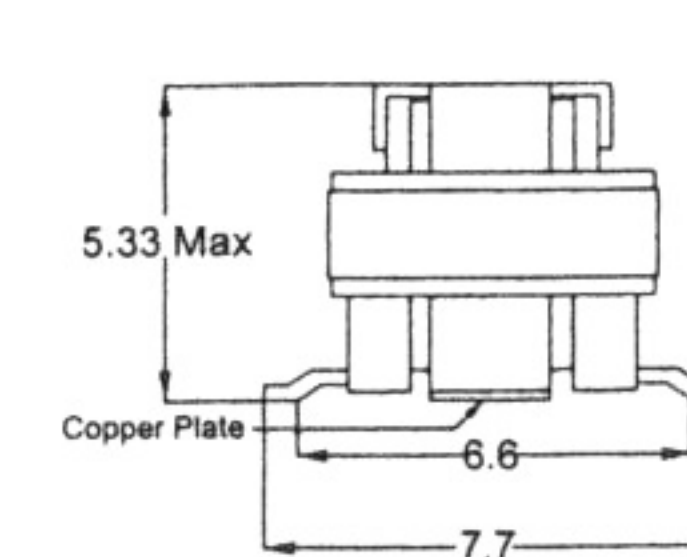
3. CST206 models have maximum recommended terminating resistance of 1 ohm per turn.
4. Primary is inserted through hole in casing.
5. 3 pin or center tapped (CT) models are designed with a T suffix.



Designed to monitor current at 250 kHz and above. These transformers have a primary current rating of 10 Amps.

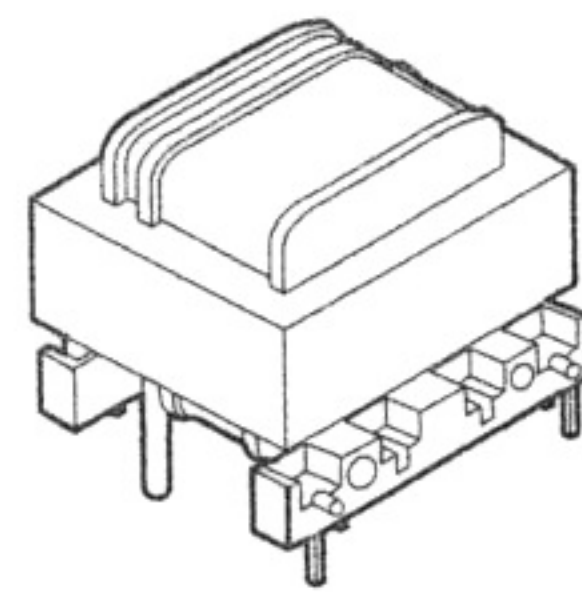
Part No.	Turns NI:N2 @ 10kHz	Secondary Inductance $\mu$ H Min.	Secondary DCR $m\Omega$ Max
CSE5-100201	1:20	80	550
CSE5-100301	1:30	180	870
CSE5-100401	1:40	320	1140
CSE5-100501	1:50	500	1500
CSE5-100601	1:60	720	1750
CSE5-100701	1:70	980	4750
CSE5-101001	1:100	2000	5500
CSE5-101251	1:125	3000	8500

### Technical Notes (mm)

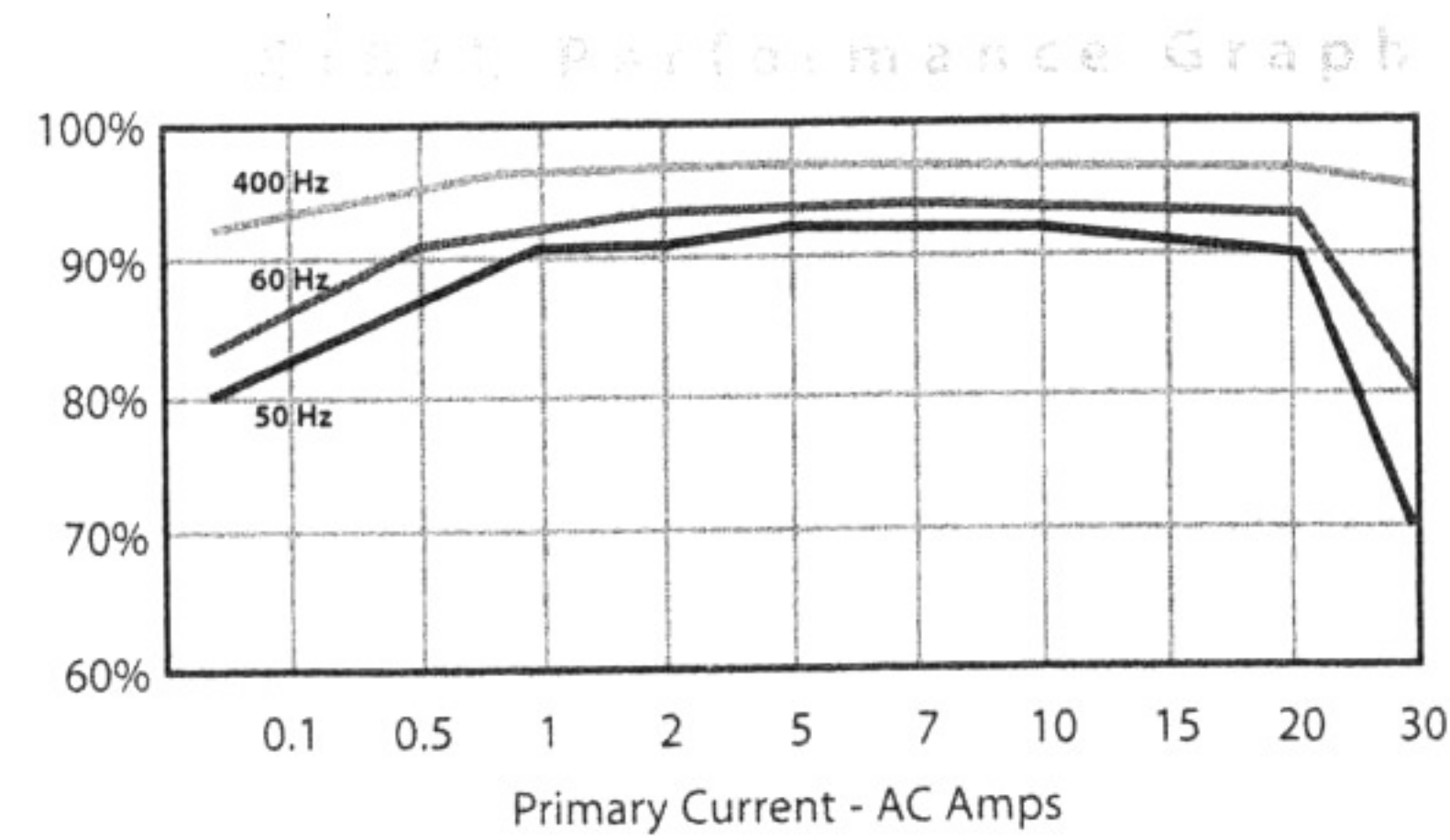


# Current Sense Transformers

Class B  
UL E705749

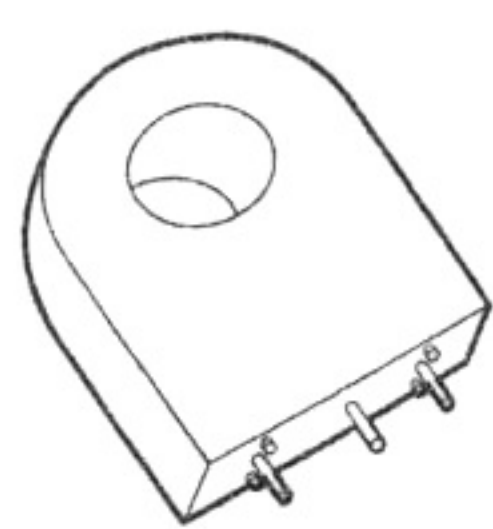


Designed to monitor current in low frequency applications. This Triad part may be used to monitor current from .1 to 30 amperes at frequencies from 50 Hz to 400 Hz.



**Technical Notes**

- Turns ratio: Primary to sense 1:500
- Suggested burden resistor: 60 ohms.
- Typical output: 110 mV/Amp.
- Primary DCR: 250 pOhms maximum.
- Sense DCR: 21 ohms maximum.
- Constructed with UL recognized materials (Class B, 130°C).
- Hi-pot: 2,500 volts wdg-wdg.
- Potted version available with a dielectric strength of 4,000 volts wdg-wdg.



Triad current sense transformers are used to detect the current passing through a conductor. These transformers are very reliable and operate effectively between 50-60 Hz. They are constructed of UL rated 130°C materials.

Part No.	Ip Amps	Turns Ratio	Terminating Resistor		DCR (Ohms) Nominal	Volts/Amp @ rated Ip for various loads				Net Weight (grams) REF	Case Dimensions - mm					
			Ohms	Watt		100	500	2K	5K		A	B	C	D	E	F
CST-1005	5	1000:1	100	0.0025	40.00	0.0958	0.4490	1.3694	1.8402	20.0	23.50	24.80	12.00	15.00	7.50	8.50
CST-1010	10	1000:1	100	0.0100	40.00	0.0969	0.4565	0.9686	1.1912	20.0	23.50	24.80	12.00	15.00	7.50	8.50
CST-1015	15	1000:1	100	0.0230	40.00	0.0971	0.4429	0.7508	0.9439	20.0	23.50	24.80	12.00	15.00	7.50	8.50
CST-1020	20	1000:1	100	0.0400	40.00	0.0977	0.3943	0.6174	0.7662	20.0	23.50	24.80	12.00	12.00	7.50	8.50
CST-1025	25	1000:1	100	0.0630	46.00	0.0976	0.4364	0.7496	0.9664	30.0	30.20	30.20	14.30	20.32	10.16	11.40
CST-1030	30	1000:1	100	0.0900	46.00	0.0977	0.4160	0.6710	0.8750	30.0	30.20	30.20	14.30	20.32	10.16	11.40

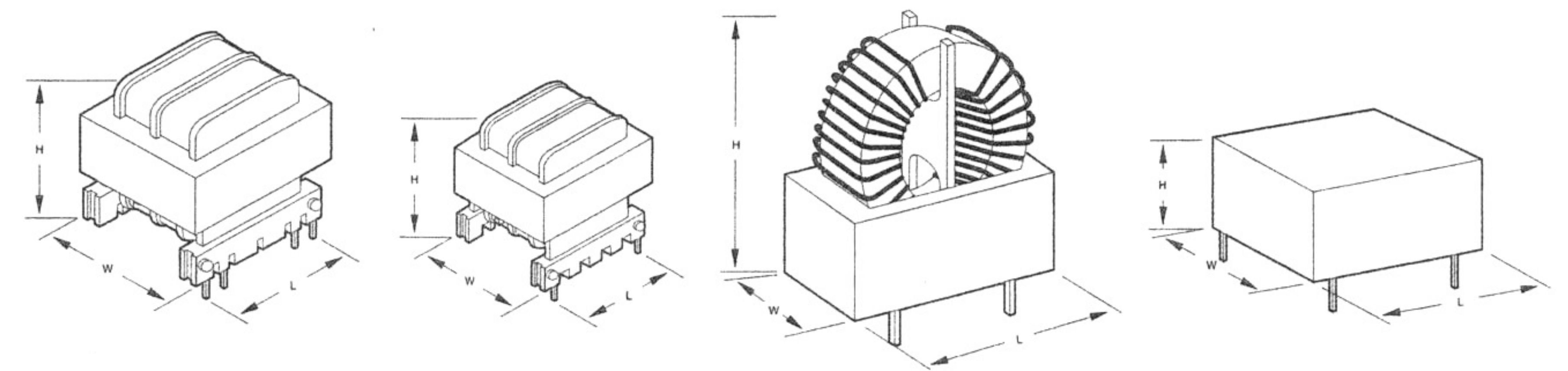
Ip: Primary Current

**Technical Notes**

- Pin length: 5 ±1mm
- Pin diameter: 0.8 ±0.1mm
- Pin 3 normally for mechanical support only

# Switchmode/High Frequency

## Common Mode Inductors



**Description**  
Highly dependable Triad common mode EMI suppression inductors are used in various types of power supplies to eliminate noise common to all lines. These units also provide effective differential mode filtering.

Meeting VDE, IEC, UL, and CSA requirements, they minimize AC line transmitted interference often created by high frequency switching power supplies. Normally placed close to the input source, these compact inductors are constructed with UL rated 130°C materials.

## E-Core Inductors

Section	Type No.	Figure	Inductance mH min.	Amps R.M.S.	Max. DC Resistance	Min. Leakage	Dimensions						Wt. Lbs.	
							H	W	L	A	B	C		D
A	CME375-1	A	4.40	5.500	.049 Ohms	45.0 µH	1.18	1.26	1.50	.150	.600	.200	.036 Sq.	0.54
	CME375-2		6.90	4.400	.077 Ohms	70.0 µH								
	CME375-3		10.9	3.500	.122 Ohms	125.0 µH								
	CME375-4		17.8	2.700	.196 Ohms	180.0 µH								
	CME375-5		28.6	2.200	.316 Ohms	300.0 µH								
	CME375-6		43.6	1.750	.489 Ohms	440.0 µH								
	CME375-7		70.3	1.380	.785 Ohms	720.0 µH								
	CME375-8		111.6	1.100	1.240 Ohms	1.1 mH								
	CME375-9		176.1	.087	1.980 Ohms	1.8 mH								
B	CME2425-1	B	1.05	2.50	.050 Ohms	9.0 µH	1.075	1.050	1.050	.125	.800	.610	.029 Sq.	.154
	CME2425-2		2.37	2.00	.080 Ohms	14.0 µH								
	CME2425-3		3.8	1.60	.127 Ohms	25.0 µH								
	CME2425-4		6.0	1.28	.202 Ohms	36.0 µH								
	CME2425-5		9.8	1.00	.319 Ohms	60.0 µH								
	CME2425-6		16.0	0.80	.500 Ohms	90.0 µH								
	CME2425-7		27.7	0.63	.820 Ohms	144.0 µH								
	CME2425-8		40.5	0.50	1.260 Ohms	240.0 µH								
	CME2425-9		67.5	0.40	2.020 Ohms	360.0 µH								

A CME375-KIT is available which includes each one of the components in section A.  
A CME2425-KIT is available which includes each one of the components in section B.

## Encapsulated Toroidal Inductor

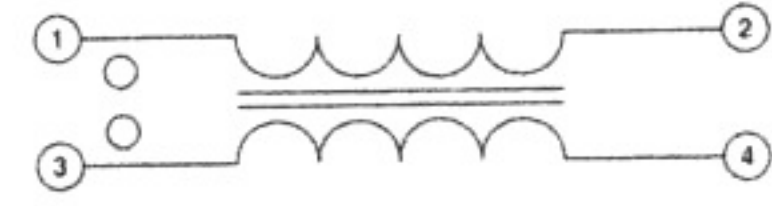
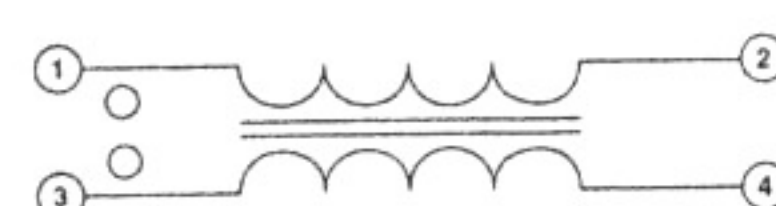
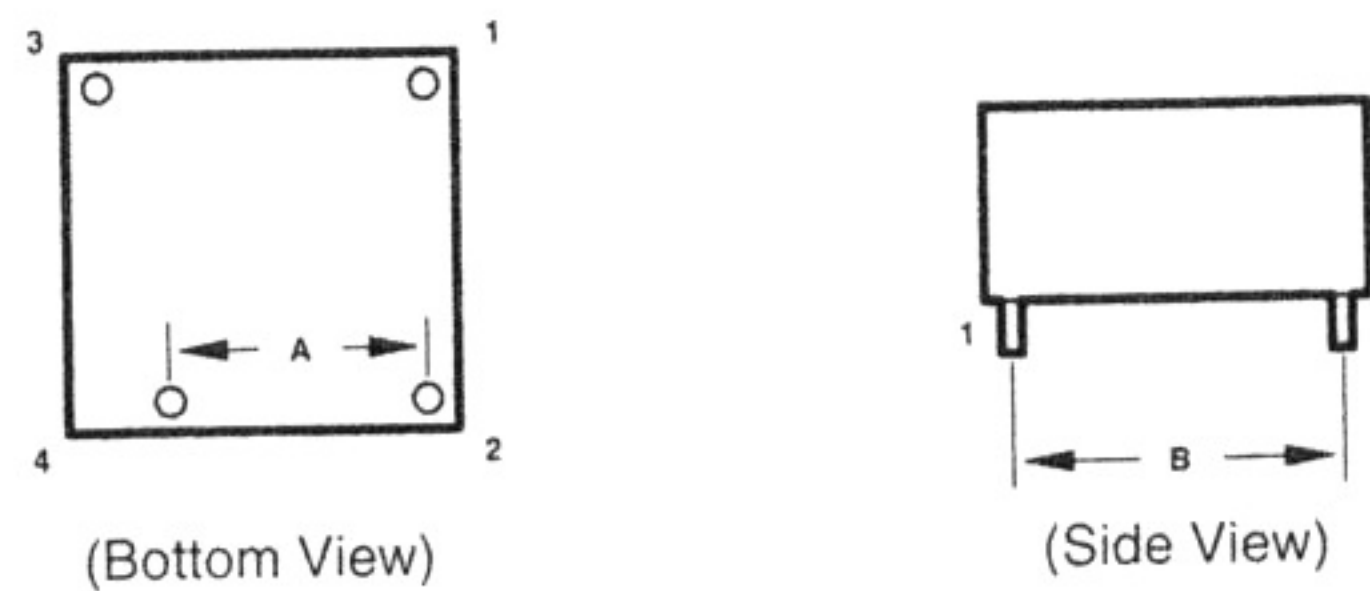
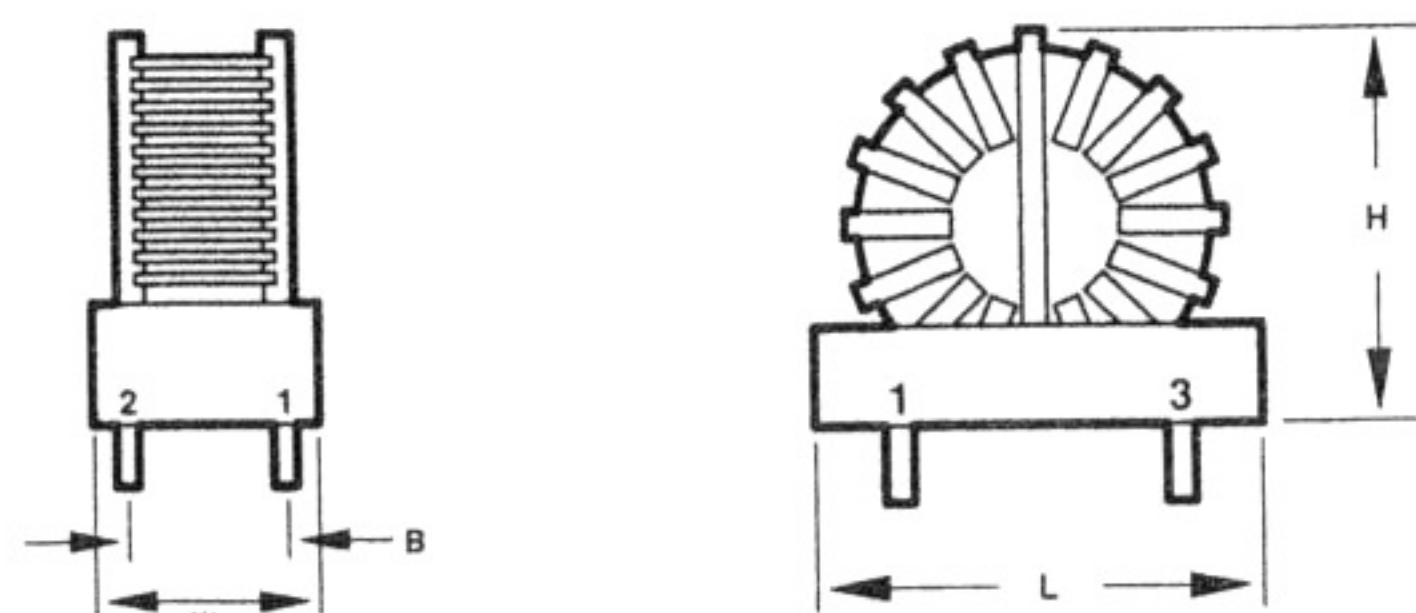
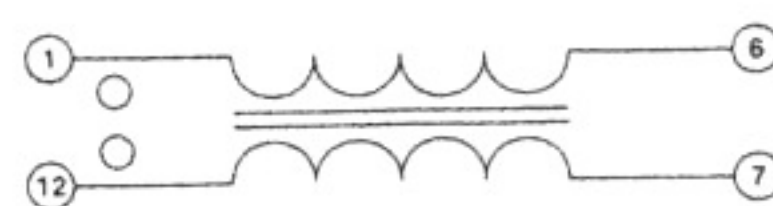
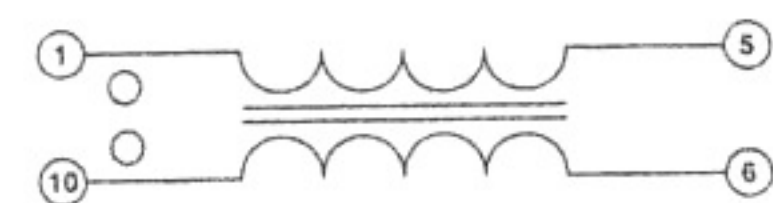
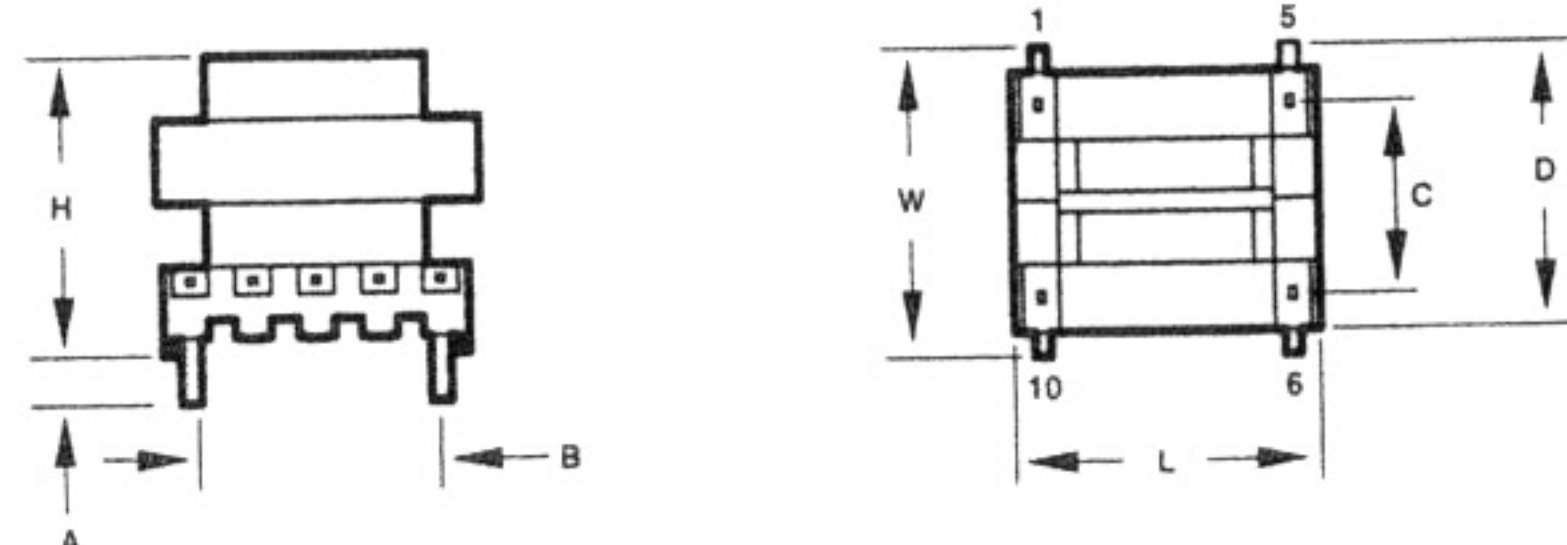
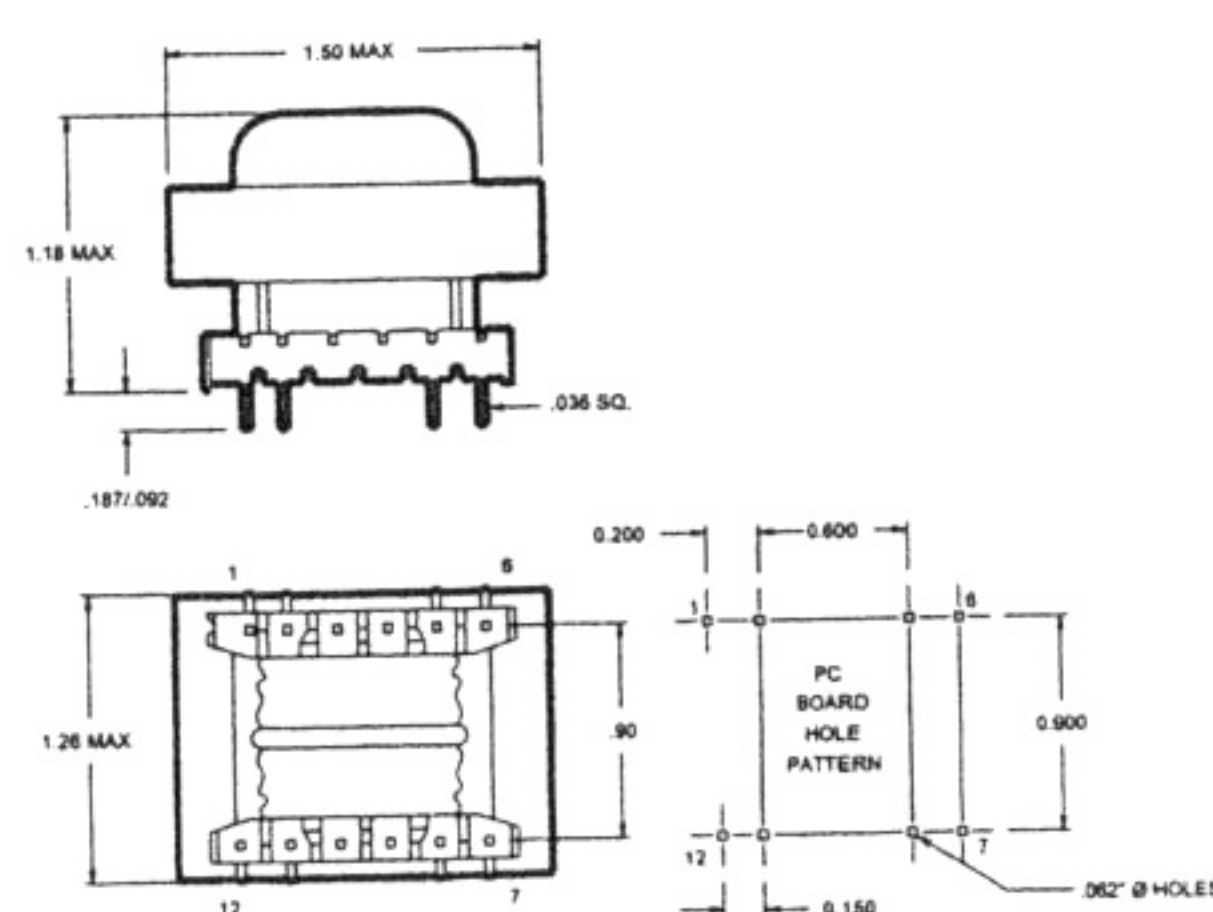
Section	Type No.	Figure	Min. Inductance	Amps R.M.S.	Max. DC Resistance	Min. Leakage	Dimensions				Wt. Lbs.	
							H	W	L	B		
C	GMT908-V1	C	2.00 mH	7.50	.020 Ohms	25.0 µH	1.50	.800	1.45	.9	.6	.08
	GMT908-V2		4.00 mH	5.20	.040 Ohms	45.0 µH						
	GMT908-V3		8.00 mH	3.20	.120 Ohms	90.0 µH						
	GMT908-V4		16.00mH	2.60	.160 Ohms	180.0 µH						
D	CMT908-H1	D	2.00 mH	7.50	.020 Ohms	25.0 µH	.80	1.5	1.5	1.08	1.28	.120
	CMT908-H2		4.00 mH	5.20	.040 Ohms	45.0 µH						
	CMT908-H3		8.00 mH	3.20	.120 Ohms	90.0 µH						
	CMT908-H4		16.00mH	2.60	.160 Ohms	180.0 µH						

A CMT908-KIT is available which includes one of each of the above listed components.



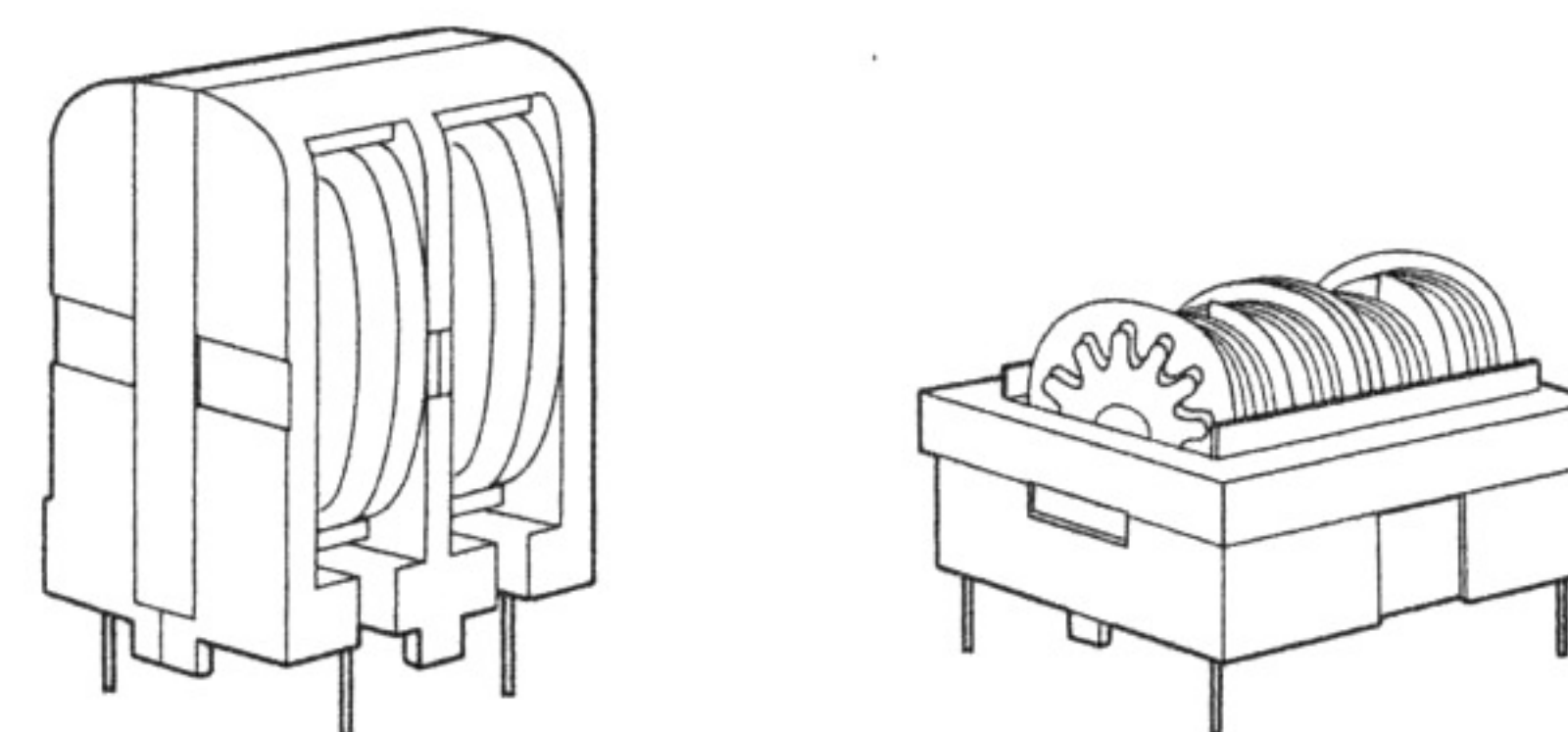
**Technical Notes**

1. Hi-pot tested at 2,500 VRMS.
2. DC resistance at 20°C ±10%.
3. Inductances are minimum measured at 10 Gauss.
4. Current ratings for approximately 40°C temperature rise.



Triad Magnetics is in the business to provide our customers with the best solutions for their magnetics needs.

# Switchmode/High Frequency



Common-mode choke coils are useful in a wide range of applications for the prevention of electromagnetic interference (EMI) and radio frequency interference (RFI) from power supply lines and for prevention of malfunctioning of various electronic equipment. Features include low leakage flux, high self-resonant frequency, high impedance at applicable frequency and low stray capacitance in section winding.

- Rated Voltage: 250 VAC
- Temperature Rise: 45°C maximum
- Insulation Resistance: 100 M Ω minimum
- Operating Temperature Range: -20 to 105°C
- Accord with Safety Standard: UL, CSA, IEC
- Dielectric Withstanding Voltage: 2,000 VAC

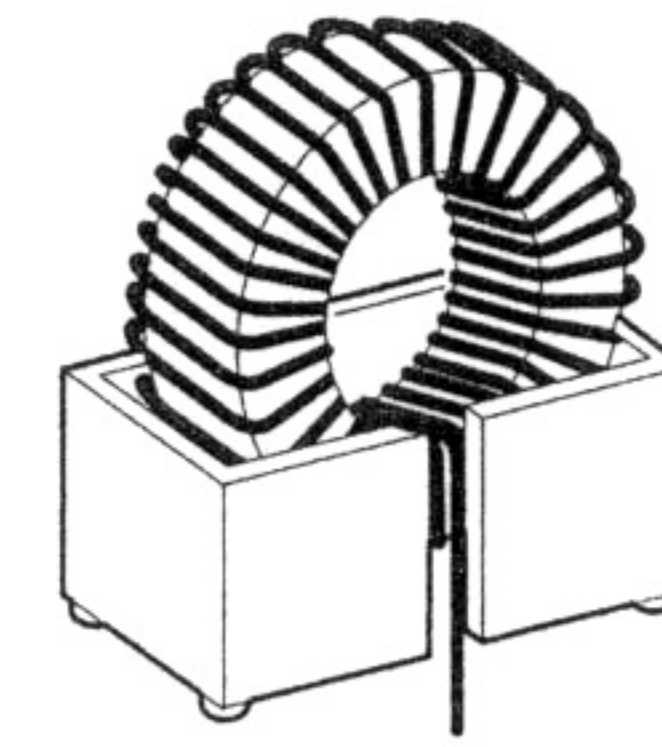
## Vertical Configuration

Section	Figure	Part No.	Inductance (mH) Min.	Inductance Difference (µH) Max.	DCR Max. (Ω)	Rated Current (A)	Dimension WxLxH (mm)	Pin Mounting Ax B (mm)	Weight Oz.
A	A	UT2024-006	9.00	300	1.40	0.50	23x18.5x23.5	13.0x10.0	.52
	A	UT2024-007	4.50	250	0.75	0.60	23x18.5x23.5	13.0x10.0	.52
	A	UT2024-008	2.50	200	0.40	0.70	23x18.5x23.5	13.0x10.0	.52
	A	UT2024-009	1.10	150	0.25	0.90	23x18.5x23.5	13.0x10.0	.52
	A	UT2024-010	0.45	100	0.13	1.00	23x18.5x23.5	13.0x10.0	.52
B	B	ET2432-018	36.00	400	2.70	0.50	26.5x19.5x31	13.0x10.0	.88
	B	ET2432-019	24.00	350	1.60	0.60	26.5x19.5x31	13.0x10.0	.88
	B	ET2432-020	9.20	300	0.75	0.70	26.5x19.5x31	13.0x10.0	.88
	B	ET2432-021	7.80	250	0.50	0.90	26.5x19.5x31	13.0x10.0	.88
	B	ET2432-022	5.20	200	0.34	1.00	26.5x19.5x31	13.0x10.0	.88
	B	ET2432-023	3.60	150	0.25	1.50	26.5x19.5x31	13.0x10.0	.88
B	ET2432-024	3.20	100	0.20	2.00	26.5x19.5x31	13.0x10.0	.88	
C	B	ET2835-034	120.00	2,500	2.60	0.50	31.5x23.5x37	13.0x10.0	1.40
	B	ET2835-035	92.00	2,000	2.00	0.60	31.5x23.5x37	13.0x10.0	1.40
	B	ET2835-036	66.00	1,500	1.50	0.70	31.5x23.5x37	13.0x10.0	1.40
	B	ET2835-037	36.00	1,000	0.80	0.90	31.5x23.5x37	13.0x10.0	1.40
	B	ET2835-038	25.00	500	0.60	1.00	31.5x23.5x37	13.0x10.0	1.40
	B	ET2835-039	15.50	350	0.32	1.50	31.5x23.5x37	13.0x10.0	1.40
	B	ET2835-040	10.00	200	0.25	2.00	31.5x23.5x37	13.0x10.0	1.40
	B	ET2835-041	8.00	150	0.19	2.50	31.5x23.5x37	13.0x10.0	1.40
B	ET2835-042	5.00	100	0.10	3.00	31.5x23.5x37	13.0x10.0	1.40	
D	B	ET3542-051	33.00	1,000	0.50	1.50	38x26x45	21.0x15.0	2.60
	B	ET3542-052	22.00	700	0.40	1.80	38x26x45	21.0x15.0	2.60
	B	ET3542-053	18.00	500	0.30	2.00	38x26x45	21.0x15.0	2.60
	B	ET3542-054	12.00	350	0.20	2.50	38x26x45	21.0x15.0	2.60
	B	ET3542-055	10.00	300	0.15	2.70	38x26x45	21.0x15.0	2.60
	B	ET3542-056	8.10	250	0.12	3.00	38x26x45	21.0x15.0	2.60
	B	ET3542-057	6.00	200	0.10	3.50	38x26x45	21.0x15.0	2.60
B	ET3542-058	4.70	150	0.08	4.00	38x26x45	21.0x15.0	2.60	

Horizontal Configuration

Section	Figure	Part No.	Inductance (mH) Min.	Inductance Difference (uH) Max.	DCR Max. (Ω)	Rated Current (A)	Dimension WxLxH (mm)	Pin Mounting AxB (mm)	Weight Oz.
A	C	UT2020-001	9.00	300	1.40	0.50	24.5x23x20	13.0x10.0	.52
	C	UT2020-002	4.50	250	0.75	0.60	24.5x23x20	13.0x10.0	.52
	C	UT2020-003	2.50	200	0.40	0.70	24.5x23x20	13.0x10.0	.52
	C	UT2020-004	1.10	150	0.25	0.90	24.5x23x20	13.0x10.0	.52
	C	UT2020-005	0.45	100	0.13	1.00	24.5x23x20	13.0x10.0	.52
B	D	ET2424-011	36.00	400	2.70	0.50	26.5x26.5x23	21.0x15.0	.88
	D	ET2424-012	24.00	350	1.60	0.60	26.5x26.5x23	21.0x15.0	.88
	D	ET2424-013	9.20	300	0.75	0.70	26.5x26.5x23	21.0x15.0	.88
	D	ET2424-014	7.80	250	0.50	0.90	26.5x26.5x23	21.0x15.0	.88
	D	ET2424-015	5.20	200	0.34	1.00	26.5x26.5x23	21.0x15.0	.88
	D	ET2424-016	3.60	150	0.25	1.50	26.5x26.5x23	21.0x15.0	.88
	D	ET2424-017	3.20	100	0.20	2.00	26.5x26.5x23	21.0x15.0	.88
C	D	ET2825-025	120.00	2,500	2.60	0.50	30x30x25	24.0x20.0	1.40
	D	ET2825-026	92.00	2,000	2.00	0.60	30x30x25	24.0x20.0	1.40
	D	ET2825-027	66.00	1,500	1.50	0.70	30x30x25	24.0x20.0	1.40
	D	ET2825-028	36.00	1,000	0.80	0.90	30x30x25	24.0x20.0	1.40
	D	ET2825-029	25.00	500	0.60	1.00	30x30x25	24.0x20.0	1.40
	D	ET2825-030	15.50	350	0.32	1.50	30x30x25	24.0x20.0	1.40
	D	ET2825-031	10.00	200	0.25	2.00	30x30x25	24.0x20.0	1.40
	D	ET2825-032	8.00	150	0.19	2.50	30x30x25	24.0x20.0	1.40
	D	ET2825-033	5.00	1.00	0.10	3.00	30x30x25	24.0x20.0	1.40

# Switchmode/High Frequency



Triad toroidal inductors are specifically designed to minimize transients. These devices store energy, and therefore, condition the output signal by leveling out the current waveform providing a more stable current supply. Generally used in high frequency circuits, our standardized design provides an economical solution in differential mode applications or as an output inductor.

Section	Type No.	Min. Inductance (pH)		Rated DC Amps	Max. DCR (mOhm)	Dimensions					Wt. Lbs.	
		No Bias	At Bias			A	B	C	D	E		F
A	FIT44-1	18.85	12.72	2.8	44.8	0.625	0.350	0.700	0.250	0.350	0.020	.008
	FIT44-2	14.75	9.82	3.4	30.7							
	FIT44-3	12.30	7.75	4.0	23.4							
	FIT44-4	8.06	5.22	4.8	15.9							
B	FIT50-1	47.40	29.00	2.8	78.9	0.700	0.475	0.750	0.300	0.474	0.020	.012
	FIT50-2	35.48	23.77	3.4	57.8							
	FIT50-3	27.16	16.13	4.0	40.1							
	FIT50-4	21.65	12.27	4.8	29.2							
	FIT50-5	16.76	9.50	5.7	20.0							
	FIT50-6	12.50	6.75	6.8	14.0							
	FIT50-7	8.86	4.80	8.1	11.0							
C	FIT68-1	89.50	57.99	2.8	108.0	0.875	0.475	0.950	0.300	0.474	0.020	.026
	FIT68-2	71.10	41.59	3.4	86.1							
	FIT68-3	54.81	33.05	4.0	59.9							
	FIT68-4	43.30	26.63	4.8	42.4							
	FIT68-5	33.15	18.79	5.7	28.8							
	FIT68-6	24.31	13.56	6.8	20.2							
	FIT68-7	18.64	10.23	8.1	14.8							
D	FIT80-1	128.00	74.04	4.0	95.2	0.975	0.625	1.100	0.450	0.624	0.026	.045
	FIT80-2	107.50	58.05	4.8	67.9							
	FIT80-3	80.75	42.00	5.7	44.8							
	FIT80-4	65.04	31.60	6.8	32.8							
	FIT80-5	47.70	22.79	8.1	22.5							
	FIT80-6	38.07	18.11	9.7	17.0							
E	FIT106-1	253.00	153.00	4.0	139.0	1.300	0.725	1.400	0.500	0.724	0.026	.090
	FIT106-2	197.00	113.00	4.8	106.0							
	FIT106-3	154.00	84.00	5.7	74.0							
	FIT106-4	116.00	61.90	6.8	48.5							
	FIT106-5	93.00	48.00	8.1	39.1							
	FIT106-6	70.05	35.30	9.7	24.0							

A FIT-KIT is available which includes one of each of the above listed components.

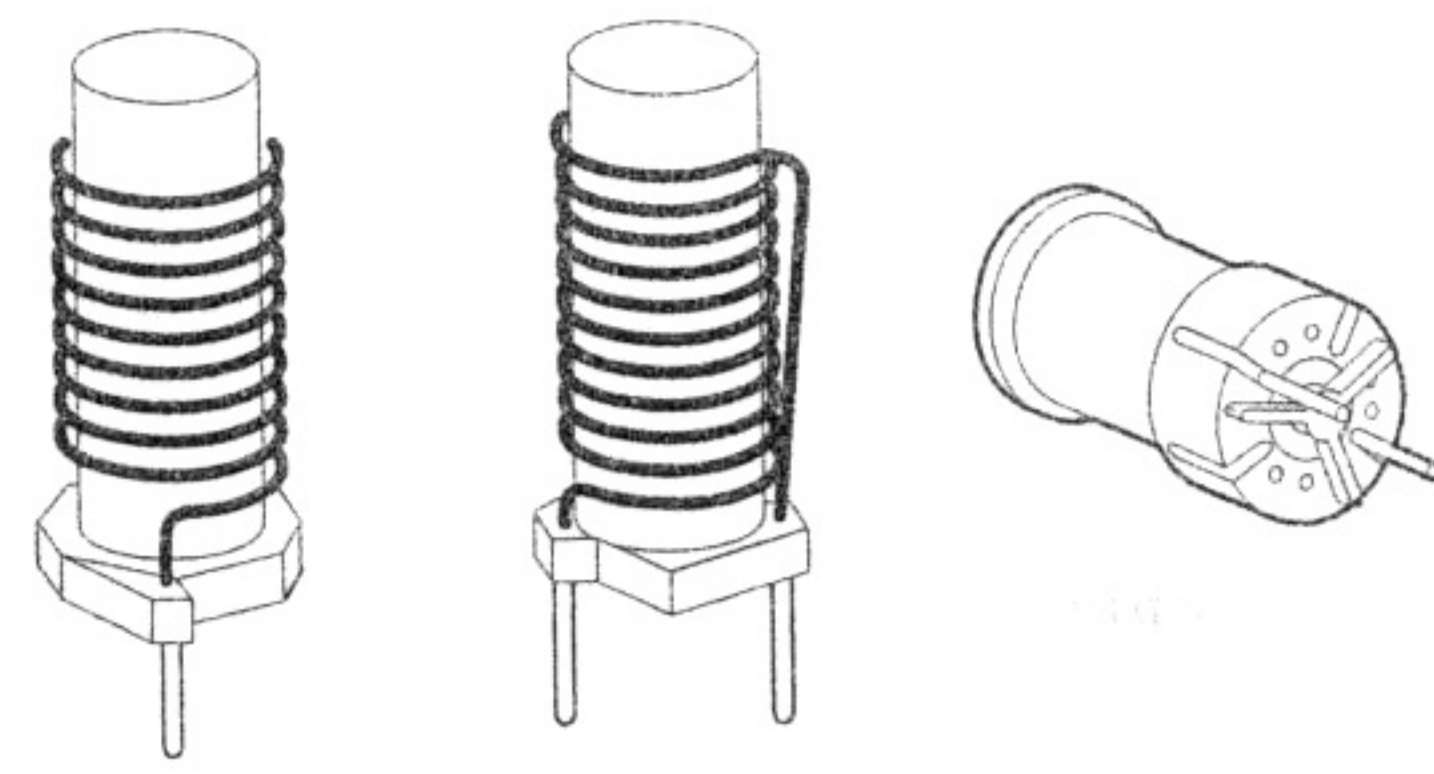
**Technical Notes**

- Nominal inductance values are typically 10% higher than minimal rating.
- Biased inductance measured at rated DC amps.
- Operation at rated current yields approximately 40°C temperature rise over 20°C ambient.

**Technical Notes**

1. The inductance difference measures between the coil L1 and L2.

# Switchmode/High Frequency



Triad high current rod core inductors provide cost effective energy storage. By conditioning the output signal, the inductor smooths out the current waveform to provide a more stable current. These low cost inductors are designed to be compatible with automated P.C.B. installation.

Operating frequency: 20KHz - 200KHz

## High Current Rod Core Inductors

Section	Type No.	Color Code	Figure	±15% Inductance µH	DC Rated Current	Max. DC Resistance (mOhms)	Lead Diameter	Wt. Lbs.
A	FIRCH-1	Red Dot	A	2.54	11.60A	5.50	.050"	.03
	FIRCH-2	Yellow Dot		3.05	9.70A	7.30	.045"	
	FIRCH-3	Orange Dot		3.60	8.10A	9.95	.040"	
	FIRCH-4	Green Dot		5.00	6.80A	14.10	.036"	
	FIRCH-5	Black Dot		5.90	5.70A	18.50	.032"	
	FIRCH-6	Brown Dot		7.22	4.80A	26.10	.028"	

A FIRCH-KIT is available which includes one of each of the above listed components.

## Rod Core Inductors

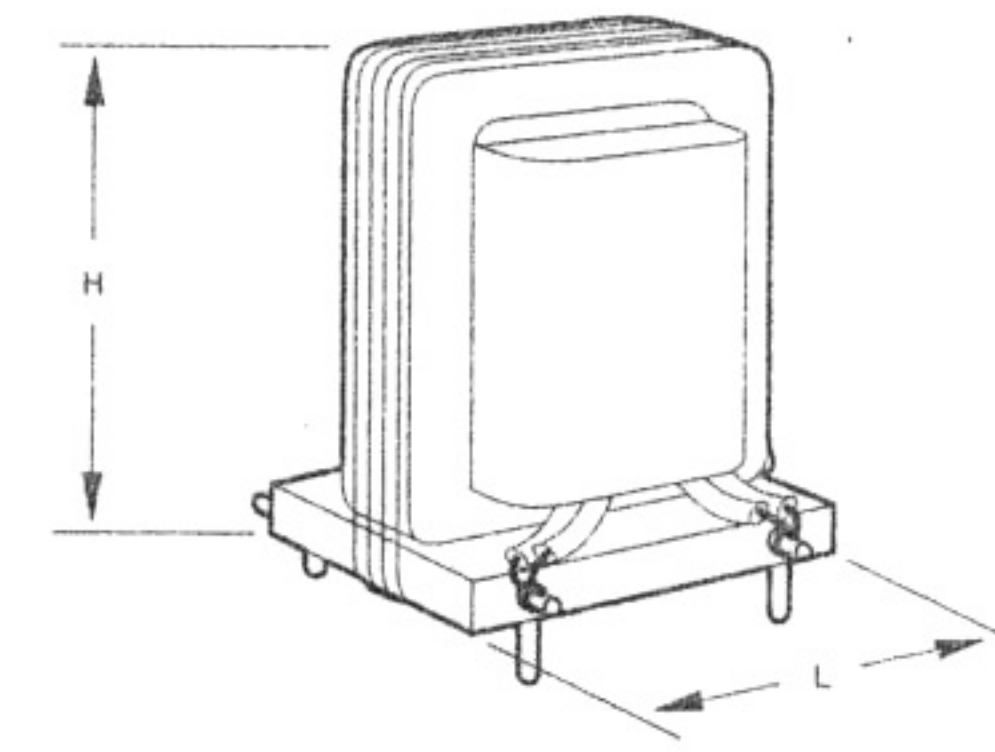
Section	Type No.	Figure	10% Inductance	DC Rated Current	±15% DC Resistance Ohms	Dimensions				Wt. Oz.
						H	L	A	B	
B	RC-1	B	5.6 mH	.250A	6.100	.93	.600	.150	.375	.03
	RC-2		3.9 mH	.320A	3.900					
	RC-3		2.5 mH	.400A	2.450					
	RC-4		1.5 mH	.500A	1.530					
	RC-5		915.0 µH	.625A	1.000					
	RC-6		560.0 µH	.800A	.600					
	RC-7		450.0 µH	1.000A	.420					
	RC-8		250.0 µH	1.250A	.210					
	RC-9		200.0 µH	1.600A	.180					
	RC-10		100.0 µH	2.000A	.098					
	RC-11		75.0 µH	2.500A	.070					

A RC-KIT is available which includes one of each of the above listed components.

**Technical Notes**  
**Figure A**  
 1. Rated current 40°C temperature rise.

**Figure B**  
 1. Rated current 10 amps per pin maximum.  
 2. Rated current renders approximately 40°C temperature rise.

# Switchmode/High Frequency



Triad gate drive transformers are used universally in all high frequency switching topologies to isolate the control circuitry from the line-connected switches. The windings are interleaved for the lowest possible practical leakage inductance. Turn ratios of 1:1 and 1:1.5 optimize coupling and enhance performance. Available with single or dual secondaries, these transformers constructed of UL rated 130°C materials are easily standardized at operating frequencies 200 kHz and beyond.

Section	Type No.	Max. DCR 1-2	Max. DCR Gate	Min. ET Product	Max. Leakage	Min. Inductance	Turns Ratio	Dimensions								Wt. Oz.
								H	W	L	A	B	C	D	E	
A	GDE25-1	.350 Ohms	.350 Ohms	540 VpSec	2.5 µH	.680 mH	1:1	1.20	1.04	1.10	.150	.700	.600	.450	.850	.045
	GDE25-2	.350 Ohms	.650 Ohms	540 VpSec	2.5 µH	.680 mH	1:1:1									
	GDE25-3	.875 Ohms	.350 Ohms	840 VpSec	3.5 µH	1.50 mH	1:5:1									
	GDE25-4	.875 Ohms	.650 Ohms	840 VpSec	3.5 µH	1.50 mH	1:5:1:1									
	GDE25-5	.350 Ohms	.875 Ohms	540 VpSec	3.5 µH	.680 mH	1:1:5									
	GDE25-6	.350 Ohms	1.75 Ohms	540 VpSec	3.5 µH	.680 mH	1:1.5:1.5									

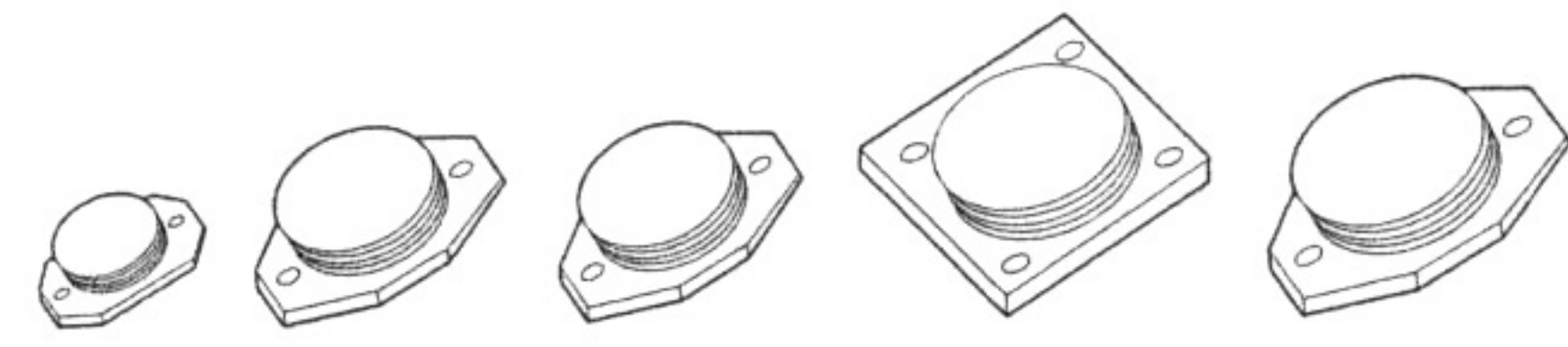
A GDE25 KIT is available which includes one of each of the above listed components.

**Technical Notes**

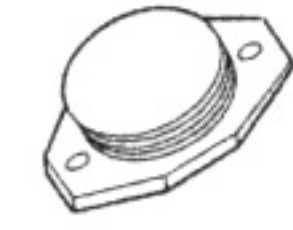
- Drive to gate winding hi-pot tested at 3,750 VRMS.
- Derate ET product by 32% for 50 kHz, 50% for 100 kHz and 50% for unidirectional operation.
- Operation at rated current per winding renders approximately 40°C temperature rise.

# SMD Power Inductor Selection Guide

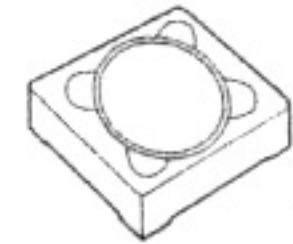
Model	Size (mm, max)	Inductance	Current Rating
AX97-10XXX	7.50 x 4.78 x 3.23	1.0 - 470pH	2.9 - 0.12A
AX97-20XXX	13.46 x 9.40 x 3.50	10 - 1000pH	2.0 - 0.05A
AX97-30XXX	13.46 x 9.40 x 5.90	1.0 - 1000pH	8.50 - 0.30A
AX97-40XXX	16.10 x 15.80 x 7.21	3.3 - 1000pH	9.80 - 0.65A
AX97-50XXX	18.95 x 15.24 x 7.21	0.78 - 1000pH	16.0 - 0.56A



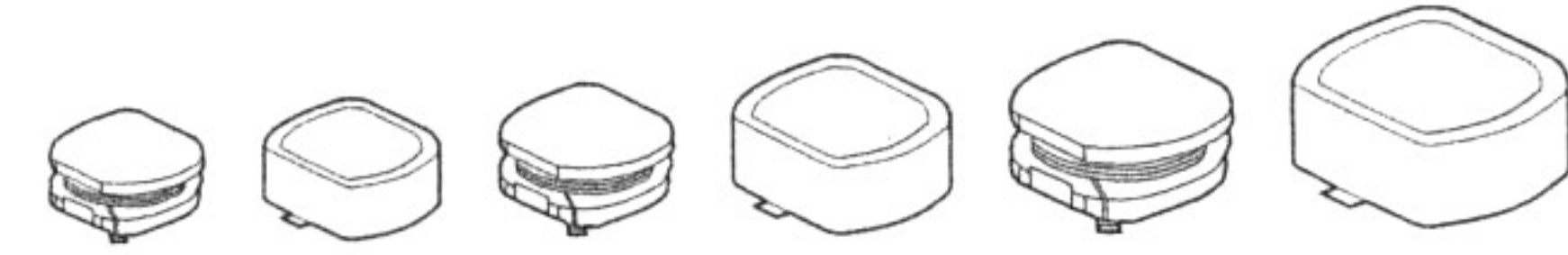
Model	Size (mm, max)	Inductance	Current Rating
AX97-10BXXX	7.30 x 4.78 x 2.92	1.0 - 1000pH	2.9 - 0.10A



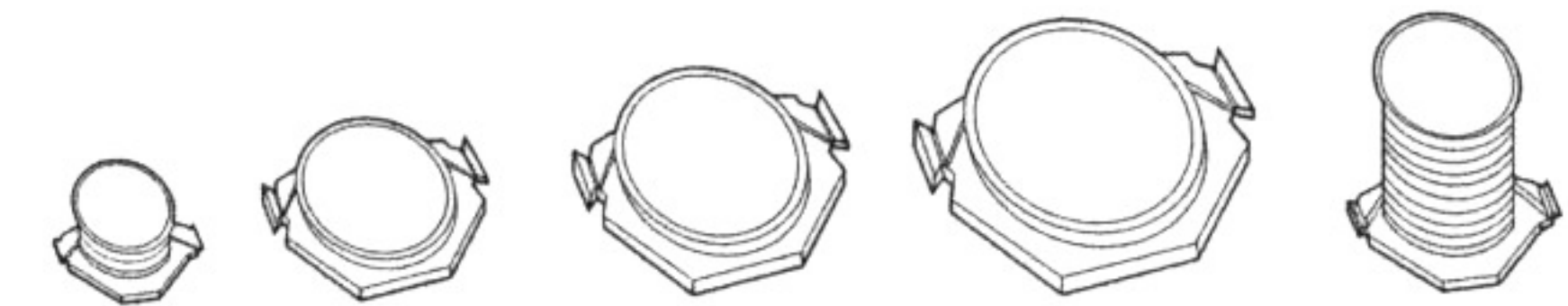
Model	Size (mm, max)	Inductance	Current Rating
AX98-50XXX	12.5 x 12.5 x 6.2	1.0 - 1000pH	9.5 - 0.4A



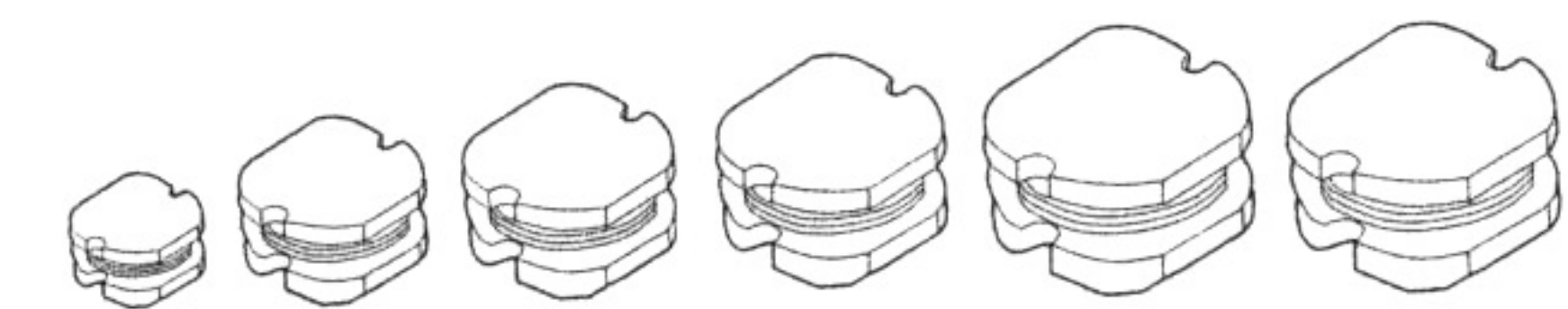
Model	Size (mm, max)	Inductance	Current Rating
AX99-10XXX	5.80 x 5.20 x 4.70	10 - 270uH	1.60 - 0.36A
AX99-20XXX	7.80 x 7.00 x 4.70	10 - 270uH	1.60 - 0.36A
AX99-30XXX	7.80 x 7.00 x 4.70	10 - 470uH	2.40 - 0.35A
AX99-40XXX	10.00 x 9.00 x 5.00	10 - 470uH	2.50 - 0.37A
AX99-50XXX	10.00 x 9.00 x 4.70	10 - 1500uH	3.00 - 0.28A
AX99-60XXX	12.60 x 11.60 x 5.00	10 - 1500uH	2.50 - 0.30A



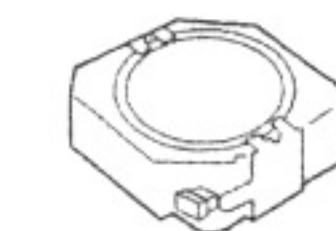
Model	Size (mm, max)	Inductance	Current Rating
AX00-10XXX	8.89 x 6.09 x 5.50	0.47 - 48.5pH	6.0 - 0.72A
AX00-20XXX	13.46 x 10.03 x 6.60	0.33 - 103pH	16 - 1.2A
AX00-30XXX	19.50 x 13.21 x 7.50	0.47 - 101.4pH	16 - 1.4A
AX00-40XXX	21.97 x 15.24 x 8.00	0.47 - 103pH	19.2 - 2.0A
AX00-50XXX	13.46 x 10.03 x 12.70	0.78 - 100pH	15 - 1.2A



Model	Size (mm, max)	Inductance	Current Rating
AX01-10XXX	4.50 x 4.00 x 3.20	1.0 - 33pH	3.80 - 0.56A
AX01-20XXX	5.80 x 5.20 x 4.50	10.0 - 220pH	2.0 - 0.35A
AX01-30XXX	7.80 x 7.00 x 3.50	10.0 - 9000pH	1.44 - 0.05A
AX01-40XXX	7.80 x 7.00 x 5.00	10.0 - 470pH	2.30 - 0.34A
AX01-50XXX	10.00 x 9.00 x 4.00	10.0 - 560pH	2.38 - 0.32A
AX01-60XXX	10.00 x 9.00 x 5.40	10 - 820pH	2.6 - 0.24A



Model	Size (mm, max)	Inductance	Current Rating
AX104RXXX	10.30 x 10.30 x 4.00	1.5 - 330pH	6.5 - 0.7A



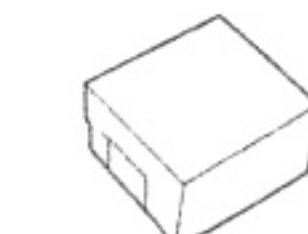
Model	Size (mm, max)	Inductance	Current Rating
AX02-30XXX	13.3 x 15.0 x 6.50	0.5 - 6.4pH	40 - 16A



Model	Size (mm, max)	Inductance	Current Rating
AXFS05-40XXX	10.4 x 10.4 x 4.1	0.22 - 4.7pH	5.5 - 25A

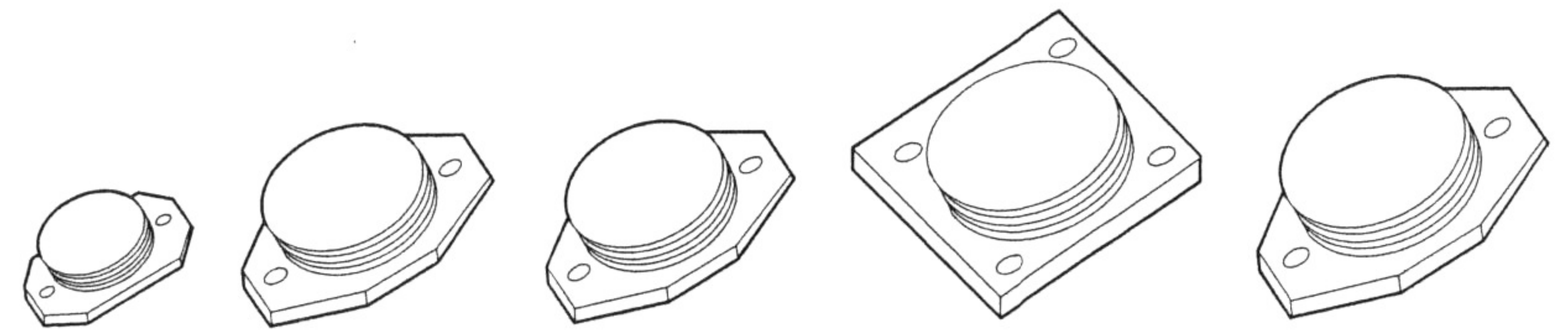


Model	Size (mm, max)	Inductance	Current Rating
AXFS06-50R10	6.5 x 6.5 x 5.0	100nH	46A



# SMD Power Inductors

AX97 Series SMD Power Inductors



**Description**

Slim type  
Low resistance  
Excellent DC current characteristics

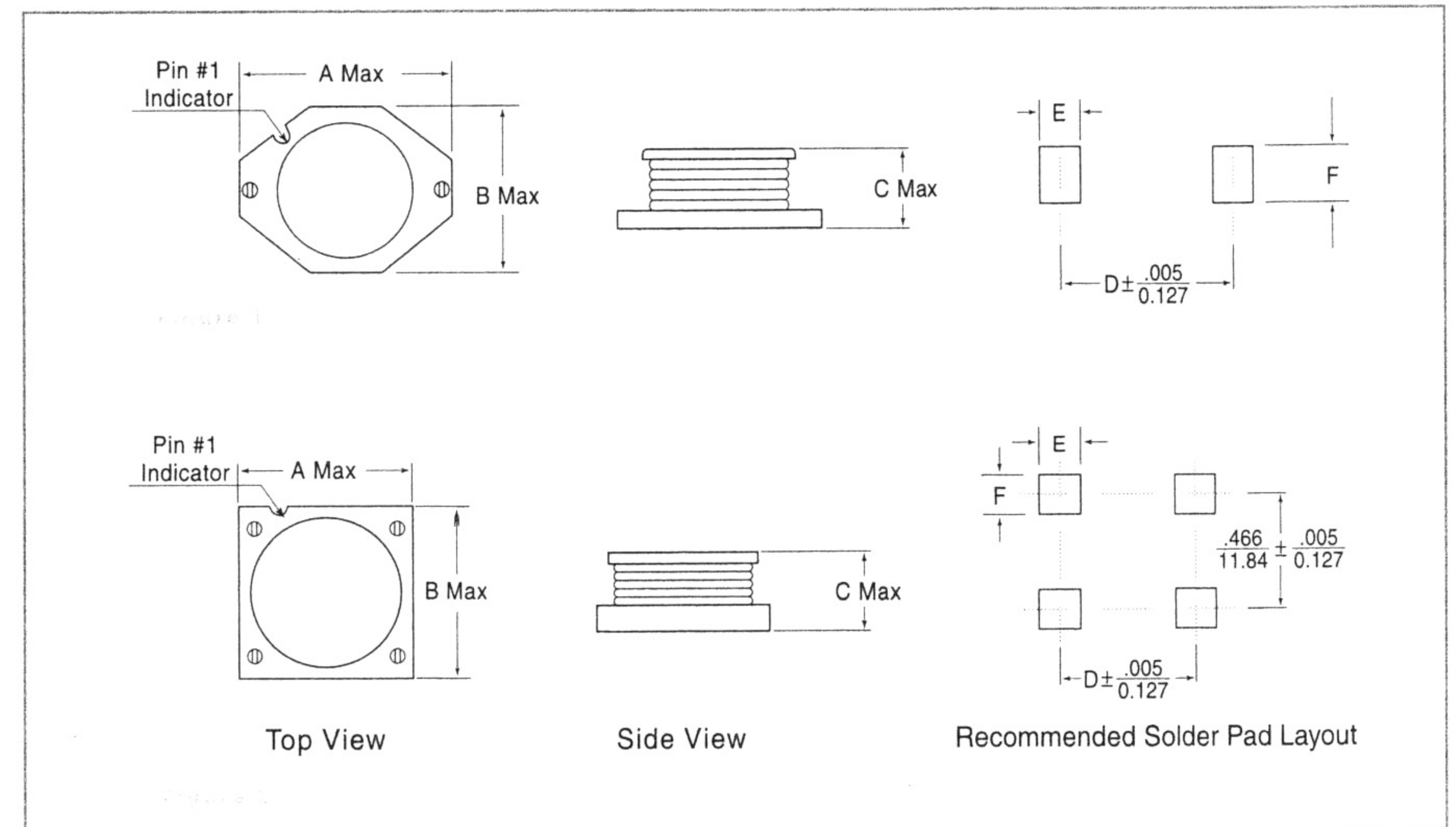
**Applications**

Laptop and notebook computers and PDAs  
DC/DC converters  
Portable communication equipment  
Inductor for general purpose use

**AX97 Series SMD Power Inductors**

Part No.	A	B	C	D	E	F	Figure
AX97-10XXX	0.295 7.30	0.188 4.78	0.127 3.23	0.218 5.54	0.059 1.50	0.100 2.54	1
AX97-20XXX	0.530 13.46	0.370 9.40	0.137 3.50	0.404 10.26	0.120 3.05	0.135 3.43	1
AX97-30XXX	0.530 13.46	0.370 9.40	0.232 5.90	0.404 10.26	0.120 3.05	0.135 3.43	1
AX97-40XXX	0.634 16.10	0.622 15.80	0.284 7.21	0.520 13.21	0.157 4.00	0.157 4.00	2
AX97-50XXX	0.746 18.95	0.600 15.24	0.284 7.21	0.595 15.11	0.145 3.68	0.135 3.43	1

**Outline Dimensions**

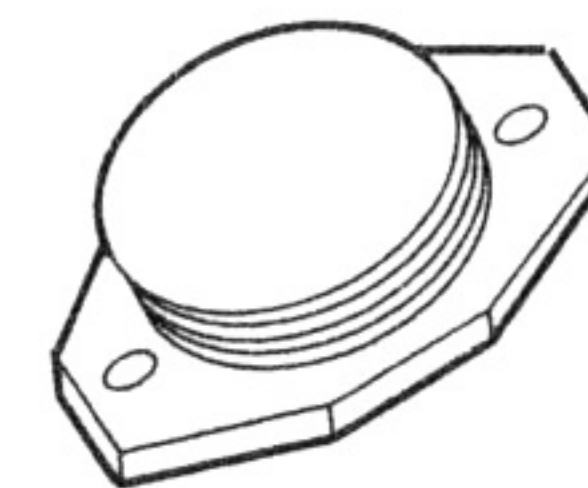


Part Number	Inductance (µH±20%) <sup>(1)</sup>	DC Resistance @ 25 Ω Max <sup>(2)</sup>	Rated Current (Amp) <sup>(3)</sup>	Figure
AX97-101R0	1.0	0.030	2.90	1
AX97-101R5	1.5	0.050	2.80	1
AX97-102R2	2.2	0.060	2.40	1
AX97-103R3	3.3	0.090	2.00	1
AX97-104R7	4.7	0.120	1.50	1
AX97-106R8	6.8	0.170	1.30	1
AX97-10100	10.0	0.220	1.00	1
AX97-10150	15.0	0.300	0.80	1
AX97-10220	22.0	0.430	0.70	1
AX97-10330	33.0	0.690	0.57	1
AX97-10470	47.0	0.920	0.46	1
AX97-10680	68.0	1.390	0.37	1
AX97-10101	100.0	1.980	0.28	1
AX97-10151	150.0	3.080	0.22	1
AX97-10221	220.0	4.470	0.18	1
AX97-10331	330.0	6.900	0.15	1
AX97-10471	470.0	11.550	0.12	1
AX97-20100	10.0	0.070	2.00	1
AX97-20150	15.0	0.090	1.50	1
AX97-20220	22.0	0.150	1.30	1
AX97-20330	33.0	0.210	1.10	1
AX97-20470	47.0	0.310	0.80	1
AX97-20680	68.0	0.420	0.70	1
AX97-20101	100.0	0.580	0.60	1
AX97-20151	150.0	0.890	0.50	1
AX97-20221	220.0	1.300	0.40	1
AX97-20331	330.0	2.000	0.30	1
AX98-20471	470.0	2.500	0.20	1
AX97-20681	680.0	3.500	0.10	1
AX97-20102	1000.0	6.000	0.05	1
AX97-301R0	1.0	0.010	8.50	1
AX97-301R5	1.5	0.010	7.90	1
AX97-302R2	2.2	0.020	7.40	1
AX97-303R3	3.3	0.020	6.60	1
AX97-304R7	4.7	0.020	6.00	1
AX98-306R8	6.8	0.030	5.20	1
AX97-308R2	8.2	0.030	5.00	1
AX97-30100	10.0	0.040	4.60	1
AX97-30150	15.0	0.050	3.70	1
AX97-30220	22.0	0.070	3.10	1
AX97-30330	33.0	0.110	2.50	1
AX97-30470	47.0	0.160	2.00	1
AX97-30680	68.0	0.200	1.80	1
AX97-30820	82.0	0.240	1.58	1

Notes: 1. Inductance measured at 100.0KHz, 0.1Vrms, without DC current.  
 2. Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which  $\Delta T=40^\circ$ , whichever is lower.  
 3. For AX97-40 Series, resistance measured with both windings conducted in parallel.

Part Number	Inductance (µH±20%) <sup>(1)</sup>	DC Resistance @ 25 Ω Max <sup>(2)</sup>	Rated Current (Amp) <sup>(3)</sup>	Figure
AX97-30101	100.00	0.3000	1.50	1
AX97-30151	150.00	0.4400	1.20	1
AX97-30221	220.00	0.6400	1.00	1
AX97-30331	330.00	1.0000	0.80	1
AX97-30471	470.00	1.5000	0.50	1
AX97-30681	680.00	2.2000	0.40	1
AX97-30102	1000.00	3.1500	0.30	1
AX97-403R3	3.30	0.0100	9.80	2
AX97-404R7	4.70	0.0100	9.30	2
AX97-406R8	6.80	0.0200	7.70	2
AX97-408R2	8.20	0.0200	7.00	2
AX97-40100	10.00	0.0200	6.50	2
AX97-40150	15.00	0.0300	5.30	2
AX97-40220	22.00	0.0400	4.40	2
AX97-40330	33.00	0.0600	3.50	2
AX97-40470	47.00	0.0700	3.00	2
AX97-40680	68.00	0.1100	2.50	2
AX97-40820	82.00	0.1200	2.20	2
AX97-40101	100.00	0.1500	2.00	2
AX97-40151	150.00	0.2200	1.70	2
AX97-40221	220.00	0.3300	1.30	2
AX97-40331	330.00	0.4500	1.10	2
AX97-40471	470.00	0.7000	0.93	2
AX97-40681	680.00	1.0000	0.78	2
AX97-40102	1000.00	1.4500	0.65	2
AX97-50R78	0.78	0.0030	16.00	1
AX97-501R3	1.30	0.0043	14.00	1
AX97-502R0	2.00	0.0050	12.00	1
AX97-502R6	2.60	0.0060	10.00	1
AX97-503R3	3.30	0.0080	9.80	1
AX97-505R6	5.60	0.0100	7.50	1
AX97-50100	10.00	0.0230	6.00	1
AX97-50150	15.00	0.0350	4.50	1
AX97-50220	22.00	0.0450	4.00	1
AX97-50330	33.00	0.0750	3.00	1
AX97-50470	47.00	0.0960	2.60	1
AX97-50680	68.00	0.1400	2.30	1
AX97-50101	100.00	0.1900	1.70	1
AX97-50151	150.00	0.2900	1.50	1
AX97-50221	220.00	0.4100	1.20	1
AX97-50331	330.00	0.5400	1.00	1
AX97-50471	470.00	0.8000	0.83	1
AX97-50681	680.00	1.1500	0.72	1
AX97-50102	1000.00	1.8000	0.56	1

# SMD Power Inductors



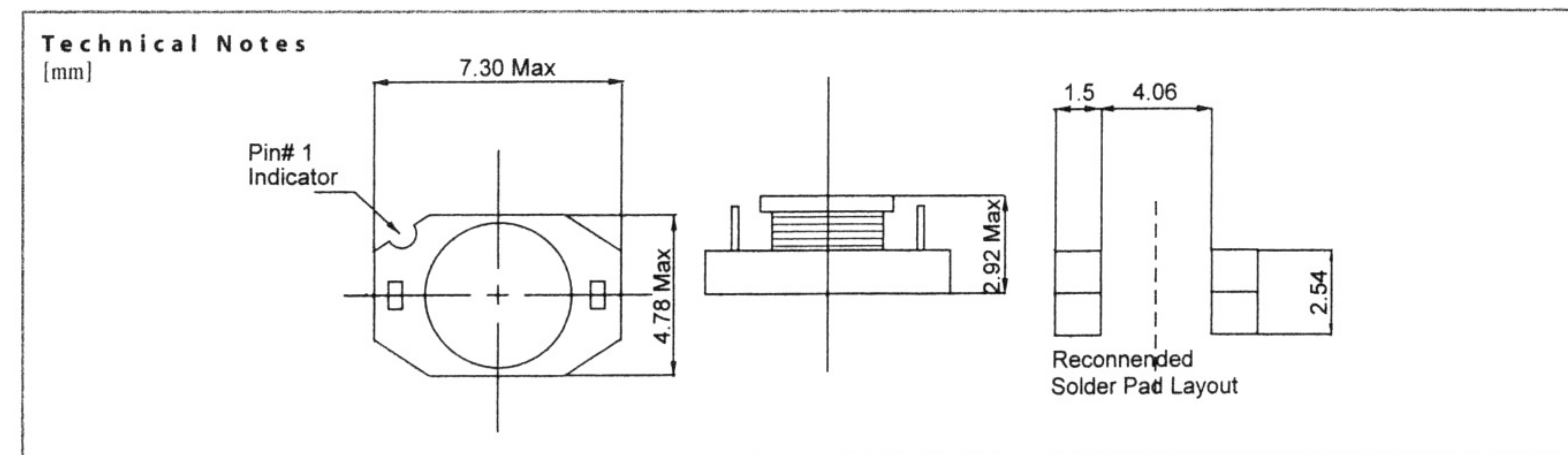
Slim type  
 Height: 2.92mm maximum  
 Low resistance  
 Excellent DC current characteristics

Laptop and notebook computers and PDAs  
 DC/DC converters  
 Portable communication equipment  
 Inductor for general purpose use

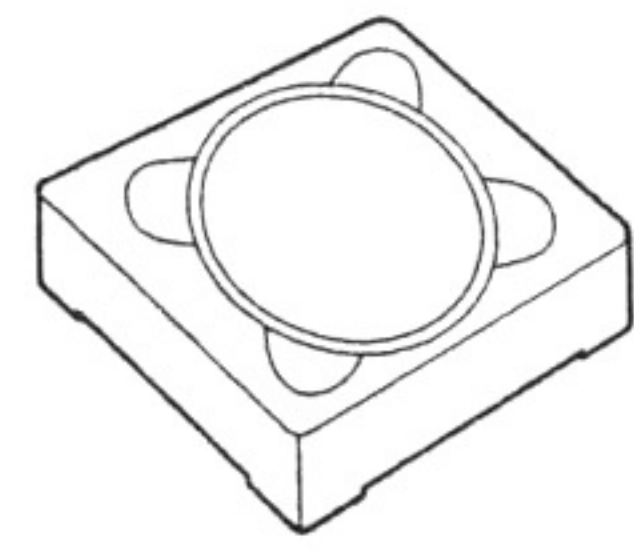
Part Number	Inductance (µH ±20%)	DC Resistance Ω Max	Rated Current Amp <sup>(2)</sup>
AX97B-101R0	1.0	0.05	2.90
AX97B-101R5	1.5	0.05	2.60
AX97B-102R2	2.2	0.07	2.30
AX97B-103R3	3.3	0.08	2.00
AX97B-104R7	4.7	0.09	1.50
AX97B-106R8	6.8	0.13	1.20
AX97B-10100	10.0	0.16	1.10
AX97B-10250	15.0	0.23	0.90
AX97B-10220	22.0	0.37	0.70
AX97B-10330	33.0	0.51	0.58

Part Number	Inductance (µH ±20%)	DC Resistance Ω Max	Rated Current Amp <sup>(2)</sup>
AX97B-10470	47	0.64	0.50
AX97B-10680	68	0.86	0.40
AX97B-10101	100	1.27	0.31
AX97B-10151	150	2.00	0.27
AX97B-10221	220	3.11	0.22
AX97B-10331	330	3.80	0.18
AX97B-10471	470	5.06	0.16
AX97B-10681	680	9.20	0.14
AX97B-10103	1000	13.80	0.10

Notes: 1. Inductance measured at 100.0KHz, 0.1V RMS without DC current.  
 2. Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which  $\Delta T=40^\circ$ , whichever is lower.



# SMD Power Inductors



:: Slim type  
 Self shielded  
 Height: 6.20mm maximum  
 Low resistance  
 Excellent DC current characteristics

:: Laptop and notebook computers and PDAs  
 DC/DC converters  
 Portable communication equipment  
 Inductor for general purpose use

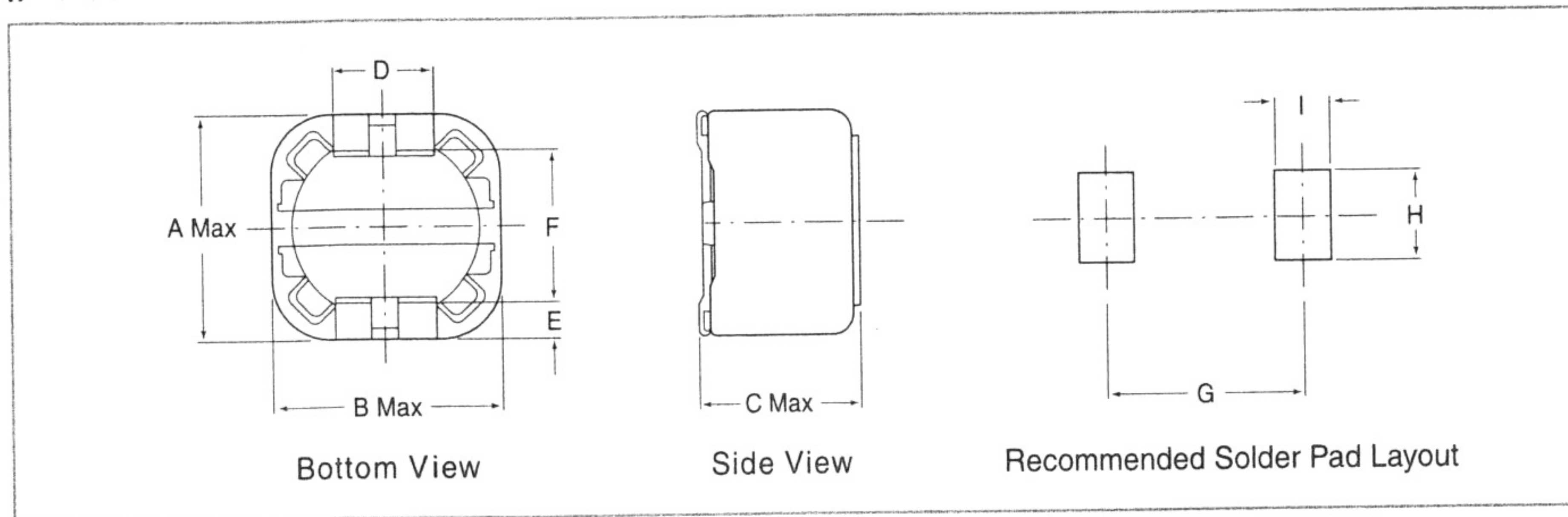
Part No.	A	B	C	D	E	F	G	H	I
AX98-50XX	0.492 12.50	0.492 12.50	0.244 6.20	0.197 5.00	0.079 2.00	0.299 7.60	0.394 10.00	0.236 6.00	0.118 3.00

Specifications

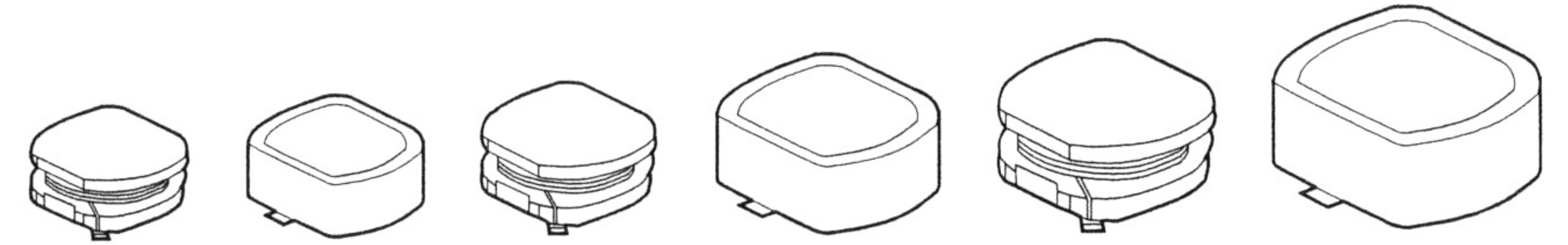
Part Number	Inductance (µH±20%) <sup>(1)</sup>	DC Resistance Ω Max	Rated Current (Amp) <sup>(2)</sup>
AX98-501R0	1.0	0.0083	9.50
AX98-501R8	1.8	0.0087	8.00
AX98-503R3	3.3	0.0131	7.00
AX98-504R5	4.5	0.0154	6.00
AX98-507R0	7.0	0.0214	5.50
AX98-50100	10.0	0.0250	4.00
AX98-50120	12.0	0.0270	3.50
AX98-50150	15.0	0.0300	3.30
AX98-50180	18.0	0.0380	3.00
AX98-50220	22.0	0.0450	2.80
AX98-50270	27.0	0.0550	2.30
AX98-50330	33.0	0.0630	2.10
AX98-50390	39.0	0.0750	2.00
AX98-50470	47.0	0.0850	1.80
AX98-50560	56.0	0.1100	1.70

Part Number	Inductance (µH±20%) <sup>(1)</sup>	DC Resistance Ω Max	Rated Current (Amp) <sup>(2)</sup>
AX98-50680	68	0.120	1.50
AX98-50820	82	0.140	1.40
AX98-50101	100	0.165	1.30
AX98-50121	120	0.195	1.10
AX98-50151	150	0.250	1.00
AX98-50181	180	0.290	0.90
AX98-50221	220	0.400	0.80
AX98-50271	270	0.460	0.75
AX98-50331	330	0.510	0.68
AX98-50391	390	0.690	0.65
AX98-50471	470	0.770	0.58
AX98-50561	560	0.880	0.54
AX98-50681	680	1.200	0.48
AX98-50821	820	1.340	0.43
AX98-50102	1000	1.530	0.40

Note: 1. Inductance measured at 1.0KHz without DC current.  
 2. Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which  $\Delta T=40^\circ$ , whichever is lower.



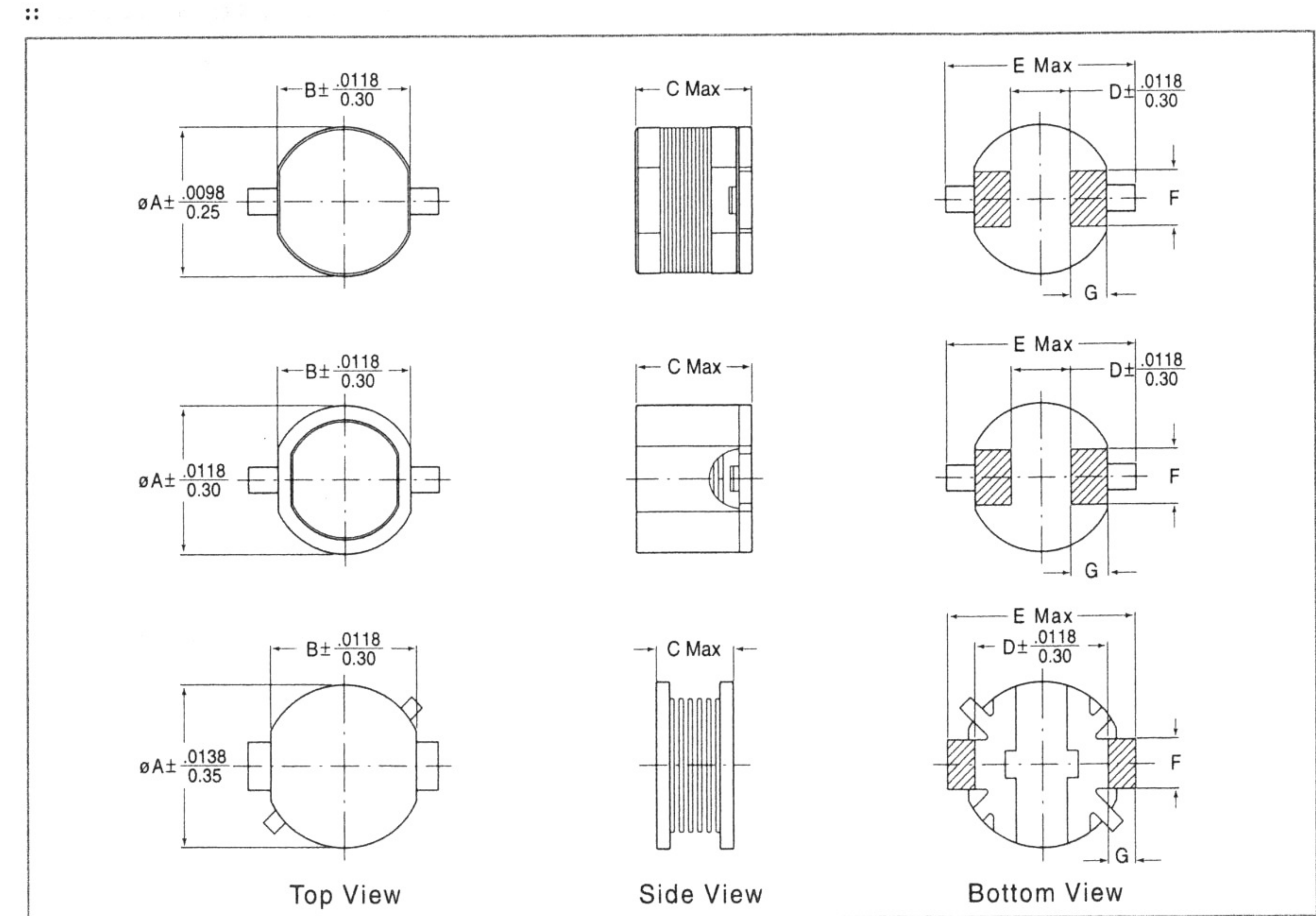
# SMD Power Inductors



:: Slim type  
 Low resistance  
 Excellent DC current characteristics

:: Laptop and notebook computers and PDAs  
 DC/DC converters  
 Portable communication equipment  
 Inductor for general purpose use

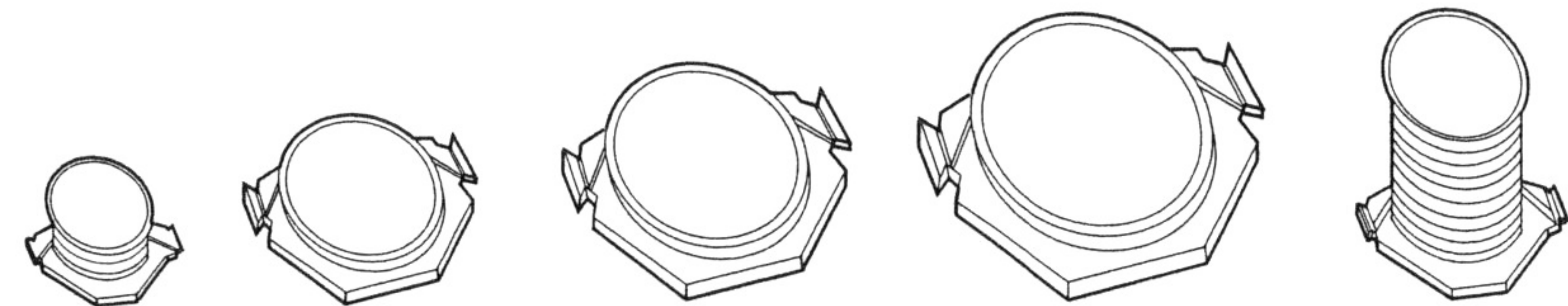
Part No.	A	B	C	D	E	F	G	Figure
AX99-10XXX	0.23 5.80	0.20 5.20	0.19 4.70	0.122 3.10	0.37 9.50	0.12 3.00	0.052 1.31	1
AX99-20XXX	0.31 7.80	0.28 7.00	0.185 4.70	0.165 4.20	0.465 11.80	0.12 3.00	0.059 1.50	2
AX99-30XXX	0.31 7.80	0.28 7.00	0.19 4.70	0.146 3.70	0.433 11.00	0.12 3.00	0.067 1.71	1
AX99-40XXX	0.39 10.00	0.35 9.00	0.197 5.00	0.197 5.00	0.512 13.00	0.12 3.00	0.097 2.00	2
AX99-50XXX	0.39 10.00	0.35 9.00	0.19 4.70	0.307 7.80	0.433 11.00	0.12 3.00	0.059 1.50	3
AX99-60XXX	0.50 12.60	0.46 11.60	0.197 5.00	0.299 7.60	0.62 15.80	0.12 3.00	0.079 2.00	2



Part Number	Inductance (µH ±20%) <sup>(1)</sup>	DC Resistance (Ω Max)	Rated Current (Amp) <sup>(2)</sup>	Figure
AX99-10100	10	0.068	1.60	1
AX99-10120	12	0.080	1.50	1
AX99-10150	15	0.088	1.45	1
AX99-10180	18	0.100	1.40	1
AX99-10220	22	0.130	1.30	1
AX99-10270	27	0.150	1.10	1
AX99-10330	33	0.180	1.00	1
AX99-10470	47	0.250	0.80	1
AX99-10560	56	0.290	0.75	1
AX99-10680	68	0.370	0.70	1
AX99-10820	82	0.420	0.65	1
AX99-10101	100	0.500	0.60	1
AX99-10121	120	0.600	0.55	1
AX99-10151	150	0.720	0.50	1
AX99-10271	270	1.200	0.36	1
AX99-20100	10	0.055	1.70	2
AX99-20120	12	0.064	1.60	2
AX99-20150	15	0.070	1.50	2
AX99-20180	18	0.080	1.40	2
AX99-20220	22	0.100	1.20	2
AX99-20270	27	0.120	1.10	2
AX99-20330	33	0.140	1.02	2
AX99-20470	47	0.190	0.86	2
AX99-20560	56	0.230	0.78	2
AX99-20680	68	0.260	0.73	2
AX99-20820	82	0.310	0.68	2
AX99-20101	100	0.410	0.60	2
AX99-20121	120	0.490	0.56	2
AX99-20151	150	0.660	0.50	2
AX99-20271	270	1.300	0.40	2
AX99-30100	10	0.050	2.40	1
AX99-30120	12	0.060	2.30	1
AX99-30150	15	0.070	2.10	1
AX99-30180	18	0.080	1.90	1
AX99-30220	22	0.100	1.70	1
AX99-30270	27	0.120	1.50	1
AX99-30330	33	0.150	1.30	1
AX99-30470	47	0.190	1.20	1
AX99-30560	56	0.210	1.00	1
AX99-30680	68	0.260	0.93	1
AX99-30820	82	0.310	0.90	1
AX99-30101	100	0.360	0.80	1
AX99-30121	120	0.500	0.75	1
AX99-30151	150	0.630	0.65	1
AX99-30181	180	0.750	0.62	1
AX99-30271	270	1.140	0.55	1
AX99-30331	330	1.350	0.45	1
AX99-30471	470	2.005	0.35	1
AX99-40100	10	0.030	2.50	2
AX99-40120	12	0.035	2.30	2
AX99-40150	15	0.040	2.10	2
AX99-40180	18	0.052	1.90	2
AX99-40220	22	0.058	1.70	2
AX99-40270	27	0.074	1.60	2
AX99-40330	33	0.081	1.40	2
AX99-40470	47	0.120	1.20	2
AX99-40560	56	0.150	1.10	2
AX99-40680	68	0.180	0.97	2

Part Number	Inductance (µH ±20%) <sup>(1)</sup>	DC Resistance (Ω Max)	Rated Current (Amp) <sup>(2)</sup>	Figure
AX99-40820	82	0.200	0.88	2
AX99-40101	100	0.260	0.80	2
AX99-40121	120	0.300	0.73	2
AX99-40151	150	0.360	0.65	2
AX99-40181	180	0.450	0.60	2
AX99-40271	270	0.600	0.49	2
AX99-40331	330	0.750	0.44	2
AX99-40391	390	0.890	0.41	2
AX99-40471	470	1.010	0.37	2
AX99-50100	10	0.045	3.00	3
AX99-50120	12	0.048	2.70	3
AX99-50150	15	0.052	2.50	3
AX99-50180	18	0.062	2.30	3
AX99-50220	22	0.080	2.20	3
AX99-50270	27	0.090	2.10	3
AX99-50330	33	0.103	2.00	3
AX99-50470	47	0.150	1.80	3
AX99-50560	56	0.170	1.50	3
AX99-50680	68	0.200	1.30	3
AX99-50820	82	0.252	1.20	3
AX99-50101	100	0.306	1.10	3
AX99-50121	120	0.350	1.00	3
AX99-50151	150	0.450	0.90	3
AX99-50181	180	0.540	0.80	3
AX99-50221	220	0.660	0.75	3
AX99-50271	270	0.830	0.65	3
AX99-50331	330	0.980	0.60	3
AX99-50391	390	1.100	0.55	3
AX99-50471	470	1.330	0.50	3
AX99-50561	560	1.700	0.46	3
AX99-50681	680	2.100	0.45	3
AX99-50821	820	2.550	0.40	3
AX99-50102	1000	3.150	0.35	3
AX99-50152	1500	4.600	0.28	3
AX99-60100	10	0.039	2.50	2
AX99-60120	12	0.042	2.40	2
AX99-60150	15	0.051	2.30	2
AX99-60180	18	0.054	2.20	2
AX99-60220	22	0.062	2.10	2
AX99-60270	27	0.066	2.00	2
AX99-60330	33	0.073	1.90	2
AX99-60470	47	0.110	1.60	2
AX99-60560	56	0.120	1.40	2
AX99-60680	68	0.140	1.30	2
AX99-60820	82	0.170	1.20	2
AX99-60101	100	0.200	1.10	2
AX99-60121	120	0.250	0.97	2
AX99-60151	150	0.300	0.86	2
AX99-60181	180	0.360	0.84	2
AX99-60221	220	0.430	0.72	2
AX99-60331	330	0.590	0.61	2
AX99-60391	390	0.720	0.58	2
AX99-60471	470	0.810	0.50	2
AX99-60561	560	0.980	0.48	2
AX99-60681	680	1.160	0.43	2
AX99-60821	820	1.420	0.38	2
AX99-60102	1000	1.900	0.35	2
AX99-60152	1500	2.420	0.30	2

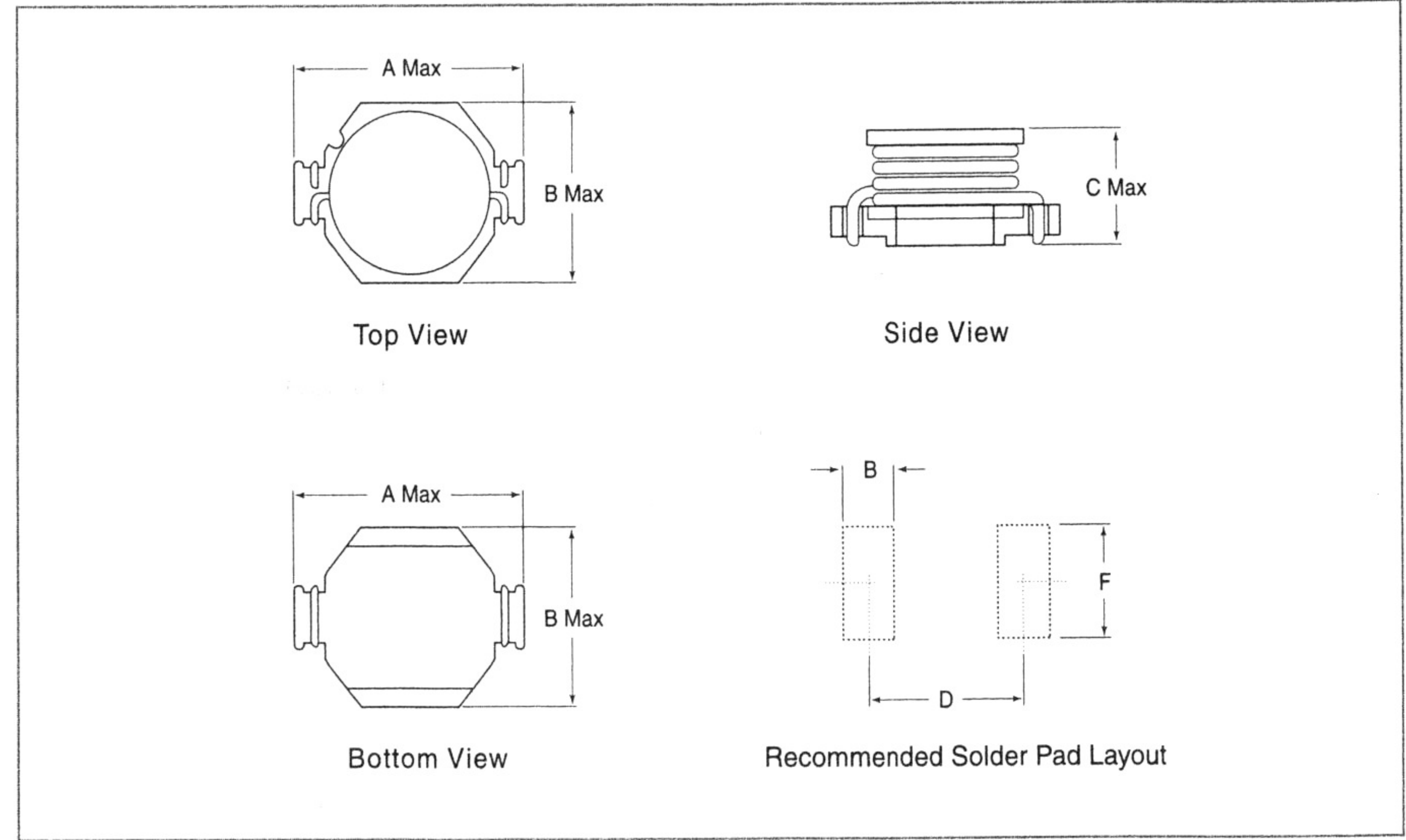
# SMD Power Inductors



Slim type  
 Low resistance  
 Excellent DC current characteristics  
 Laptop and notebook computers and PDAs  
 DC/DC converters  
 Portable communication equipment  
 Inductor for general purpose use

AX00 Series SMD Power Inductors

Part No.	A	B	C	D	E	F
AX00-10XXX	0.350 8.89	0.240 6.09	0.217 5.50	0.290 7.37	0.137 3.48	0.225 5.72
AX00-20XXX	0.530 13.46	0.395 10.03	0.260 6.60	0.410 10.41	0.135 3.43	0.295 7.49
AX00-30XXX	0.768 19.50	0.520 13.21	0.295 7.50	0.610 15.50	0.135 3.43	0.370 9.40
AX00-40XXX	0.865 21.97	0.600 15.24	0.315 8.00	0.690 17.53	0.150 3.81	0.370 9.40
AX00-50XXX	0.530 13.46	0.395 10.03	0.500 12.70	0.410 10.41	0.135 3.43	0.295 7.49



Note: 1. Inductance measured at 100KHz 0.1Vrms, without DC current.  
 2. Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which  $\Delta T = 40^\circ$ , whichever is lower.

Specifications

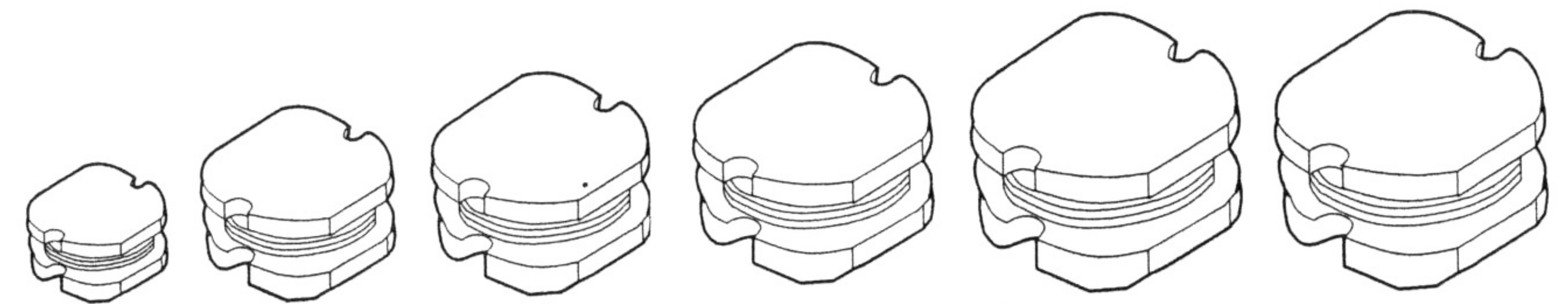
Part Number	Inductance Ldc (µH Typ)	Inductance L0 (µH ±20%) <sup>(1)</sup>	DC Resistance @ 25 mMax	Rated Current (Amp) <sup>(2)</sup>
AX00-10R47	0.47	0.47	7.9	6.00
AX00-101R0	1.00	1.00	12.5	4.40
AX00-101R5	1.50	1.60	14.5	4.20
AX00-102R2	2.20	2.26	24.1	3.10
AX00-103R3	3.30	3.45	31.8	2.90
AX00-104R7	4.70	4.85	54.7	2.20
AX00-106R8	6.80	6.90	57.1	1.70
AX00-10100	10.00	10.40	81.3	1.50
AX00-10150	15.00	15.30	124.0	1.20
AX00-10220	22.00	23.00	183.0	1.00
AX00-10330	33.00	33.60	265.0	0.82
AX00-10470	47.00	48.50	334.0	0.72
AX00-20R33	0.33	0.33	2.0	16.00
AX00-20R68	0.68	0.70	3.5	12.00
AX00-201R0	1.00	1.10	4.6	10.00
AX00-201R5	1.50	1.50	6.1	9.00
AX00-202R2	2.20	2.27	7.8	7.40
AX00-202R7	2.70	2.90	10.0	6.60
AX00-203R3	3.30	3.30	11.0	5.90
AX00-204R7	4.70	4.80	15.1	4.80
AX00-20100	10.00	10.00	35.0	3.30
AX00-20150	15.00	15.43	45.0	3.10
AX00-20220	22.00	22.50	62.0	2.80
AX00-20330	33.00	33.20	92.0	2.10
AX00-20470	47.00	48.70	139.0	1.70
AX00-20680	68.00	68.20	177.0	1.50
AX00-20101	100.00	103.00	237.0	1.20
AX00-30R47	0.47	0.47	2.1	16.00
AX00-301R0	1.00	1.10	3.8	12.50
AX00-301R5	1.50	1.65	4.9	10.00
AX00-302R2	2.20	2.30	5.1	9.20
AX00-303R3	3.30	3.44	10.0	8.00
AX00-304R7	4.70	5.00	11.4	6.50
AX00-306R8	6.80	6.90	17.8	5.80
AX00-30100	10.00	10.58	22.8	4.30
AX00-30150	15.00	15.50	35.0	3.90

Note: 1. Inductance measured at 100.0KHz, 0.1V without DC current.  
 2. Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which  $\Delta T=40^\circ$ , whichever is lower.

Part Number	Inductance Ldc (µH Typ)	Inductance L0 (µH ±20%) <sup>(1)</sup>	DC Resistance @ 25 mMax	Rated Current (Amp) <sup>(2)</sup>
AX00-30220	22.00	22.90	49.10	3.1
AX00-30330	33.00	33.90	69.00	2.4
AX00-30470	47.00	48.00	108.20	1.9
AX00-30680	68.00	69.50	156.00	1.6
AX00-30101	100.00	101.40	205.50	1.4
AX00-40R47	0.47	0.47	1.70	19.2
AX00-401R0	1.00	1.00	2.50	17.3
AX00-401R3	1.30	1.30	3.50	15.0
AX00-402R2	2.20	2.20	4.70	12.0
AX00-403R3	3.30	3.30	8.40	10.0
AX00-403R9	3.90	3.90	7.50	9.0
AX00-404R7	4.70	4.75	9.50	8.5
AX00-406R0	6.00	6.00	13.70	7.5
AX00-407R8	7.80	7.80	15.40	7.5
AX00-40100	10.00	10.00	22.00	6.0
AX00-40150	15.00	15.60	29.50	5.5
AX00-40220	22.00	22.60	34.00	4.5
AX00-40330	33.00	34.50	52.00	3.7
AX00-40470	47.00	48.00	71.00	3.1
AX00-40680	68.00	69.20	104.00	2.4
AX00-40101	100.00	103.00	156.0	2.0
AX00-50R78	0.78	0.78	2.60	15.0
AX00-501R0	1.00	1.00	3.10	17.3
AX00-501R5	1.50	1.52	4.00	15.0
AX00-502R2	2.20	2.27	5.60	12.0
AX00-503R3	3.30	3.30	7.00	11.0
AX00-503R9	3.90	4.00	10.0	9.0
AX00-504R7	4.70	4.70	9.50	6.5
AX00-507R5	7.50	7.50	15.00	6.0
AX00-50100	10.00	10.00	40.00	3.5
AX00-50150	15.00	15.00	50.00	3.0
AX00-50220	22.00	22.00	66.00	2.5
AX00-50330	33.00	33.00	80.00	2.0
AX00-50470	47.00	47.00	110.00	1.6
AX00-50680	68.00	68.00	170.00	1.2
AX00-50101	100.00	100.00	220.00	1.2

# SMD Power Inductors

AX01 Series SMD Power Inductors

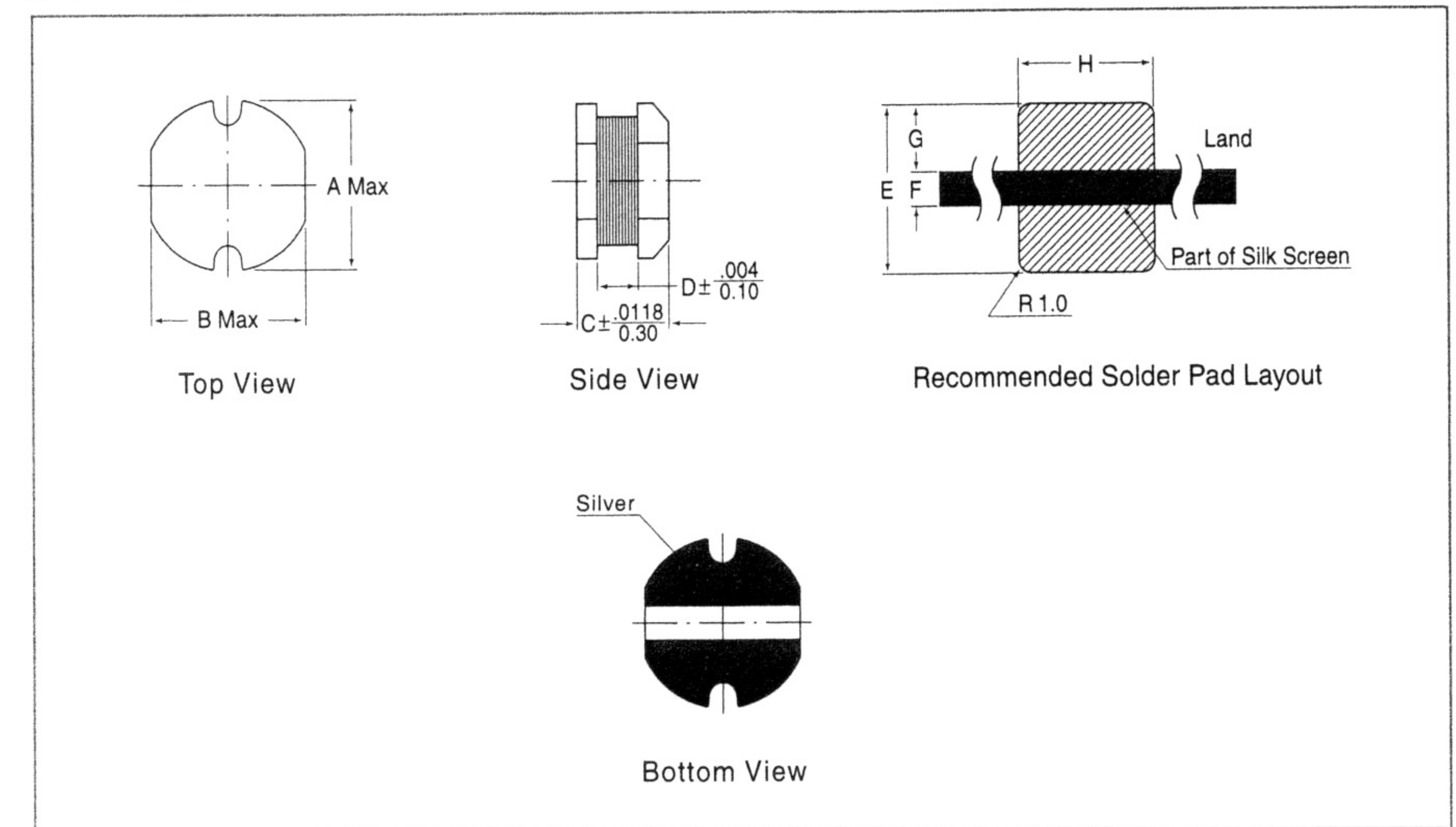


Slim type  
 Low resistance  
 Excellent DC current characteristics

Applications  
 Laptop and notebook computers and PDAs  
 DC/DC converters  
 Portable communication equipment  
 Inductor for general purpose use

AX01 Series SMD Power Inductors

Part No.	A	B	C	D	E	F	G
AX01-10XXX	0.177 4.50	0.158 4.00	0.126 3.20	0.177 4.50	0.205 5.20	0.059 1.50	0.069 1.75
AX01-20XXX	0.228 5.80	0.205 5.20	0.177 4.50	0.228 5.80	0.240 6.10	0.069 1.70	0.085 2.15
AX01-30XXX	0.307 7.80	0.276 7.00	0.140 3.50	0.315 8.00	0.315 8.00	0.079 2.00	0.118 3.00
AX01-40XXX	0.307 7.80	0.276 7.00	0.199 5.00	0.315 8.00	0.315 8.00	0.079 2.00	0.118 3.00
AX01-50XXX	0.394 10.00	0.354 9.00	0.158 4.00	0.394 10.00	0.394 10.00	0.098 2.50	0.148 3.75
AX01-60XXX	0.394 10.00	0.354 9.00	0.213 5.40	0.394 10.00	0.394 10.00	0.098 2.50	0.148 3.75





Part Number	Inductance (µH ±20%) <sup>(1)</sup>	DC Resistance @ 25 Ω Max	Rated Current (Amp) <sup>(2)</sup>
AX01-101R0	1.0	0.033	3.80
AX01-101R4	1.4	0.056	2.52
AX01-101R8	1.8	0.065	1.95
AX01-102R2	2.2	0.071	1.75
AX01-102R7	2.7	0.078	1.58
AX01-103R3	3.3	0.086	1.44
AX01-103R9	3.9	0.093	1.33
AX01-104R7	4.7	0.094	1.70
AX01-105R6	5.6	0.125	0.99
AX01-106R8	6.8	0.131	0.95
AX01-108R2	8.2	0.146	0.84
AX01-10100	10.0	0.182	1.04
AX01-10120	12.0	0.210	0.97
AX01-10150	15.0	0.235	0.85
AX01-10180	18.0	0.338	0.74
AX01-10220	22.0	0.378	0.68
AX01-10270	27.0	0.522	0.62
AX01-10330	33.0	0.540	0.56
AX01-20100	10.0	0.056	2.00
AX01-20120	12.0	0.120	1.40
AX01-20150	15.0	0.140	1.30
AX01-20180	18.0	0.150	1.23
AX01-20220	22.0	0.180	1.11
AX01-20270	27.0	0.200	0.97
AX01-20330	33.0	0.230	0.88
AX01-20390	39.0	0.320	0.80
AX01-20470	47.0	0.370	0.72
AX01-20560	56.0	0.420	0.68
AX01-20680	68.0	0.460	0.61
AX01-20820	82.0	0.600	0.58
AX01-20101	100.0	0.700	0.52
AX01-20121	120.0	0.930	0.48
AX01-20151	150.0	1.100	0.40
AX01-20181	180.0	1.380	0.38
AX01-20221	220.0	1.570	0.35
AX01-30100	10.0	0.080	1.44

Note: 1. Inductance measured at 100.0KHz, 0.1V without DC current.

2. Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which  $\Delta T=40^\circ$ , whichever is lower.

Part Number	Inductance (µH ±20%) <sup>(1)</sup>	DC Resistance @ 25 Ω Max	Rated Current (Amp) <sup>(2)</sup>
AX01-30120	12.0	0.089	1.39
AX01-30150	15.0	0.104	1.24
AX01-30180	18.0	0.111	1.12
AX01-30220	22.0	0.129	1.07
AX01-30270	27.0	0.153	0.94
AX01-30330	33.0	0.170	0.85
AX01-30390	39.0	0.217	0.74
AX01-30470	47.0	0.252	0.68
AX01-30560	56.0	0.282	0.64
AX01-30680	68.0	0.332	0.59
AX01-30820	82.0	0.406	0.54
AX01-30101	100.0	0.481	0.51
AX01-30121	120.0	0.536	0.49
AX01-30151	150.0	0.755	0.40
AX01-30181	180.0	1.022	0.36
AX01-30221	220.0	1.200	0.31
AX01-30271	270.0	1.306	0.29
AX01-30331	330.0	1.495	0.28
AX01-30902	9000.0	41.000	0.05
AX01-40100	10.0	0.070	2.30
AX01-40120	12.0	0.080	2.00
AX01-40150	15.0	0.090	1.80
AX01-40180	18.0	0.100	1.60
AX01-40220	22.0	0.110	1.50
AX01-40270	27.0	0.120	1.30
AX01-40330	33.0	0.130	1.20
AX01-40390	39.0	0.160	1.10
AX01-40470	47.0	0.180	1.00
AX01-40560	56.0	0.240	0.94
AX01-40680	68.0	0.280	0.85
AX01-40820	82.0	0.370	0.78
AX01-40101	100.0	0.430	0.72
AX01-40121	120.0	0.470	0.66
AX01-40151	150.0	0.640	0.58
AX01-40181	180.0	0.710	0.51
AX01-40221	220.0	0.960	0.49

Specifications

Part Number	Inductance (µH ±20%) <sup>(1)</sup>	DC Resistance @ 25 Ω Max	Rated Current (Amp) <sup>(2)</sup>
AX01-40271	270.0	1.110	0.42
AX01-40331	330.0	1.260	0.40
AX01-40391	390.0	1.770	0.36
AX01-40471	470.0	1.960	0.34
AX01-50100	10.0	0.053	2.38
AX01-50120	12.0	0.061	2.13
AX01-50150	15.0	0.070	1.87
AX01-50180	18.0	0.081	1.73
AX01-50220	22.0	0.088	1.60
AX01-50270	27.0	0.100	1.44
AX01-50330	33.0	0.120	1.26
AX01-50390	39.0	0.151	1.20
AX01-50470	47.0	0.170	1.10
AX01-50560	56.0	0.199	1.01
AX01-50680	68.0	0.223	0.91
AX01-50820	82.0	0.252	0.85
AX01-50101	100.0	0.344	0.74
AX01-50121	120.0	0.396	0.69
AX01-50151	150.0	0.544	0.61
AX01-50181	180.0	0.621	0.56
AX01-50221	220.0	0.721	0.53
AX01-50271	270.0	0.949	0.45
AX01-50331	330.0	1.100	0.42
AX01-50391	390.0	1.245	0.38
AX01-50471	470.0	1.526	0.35

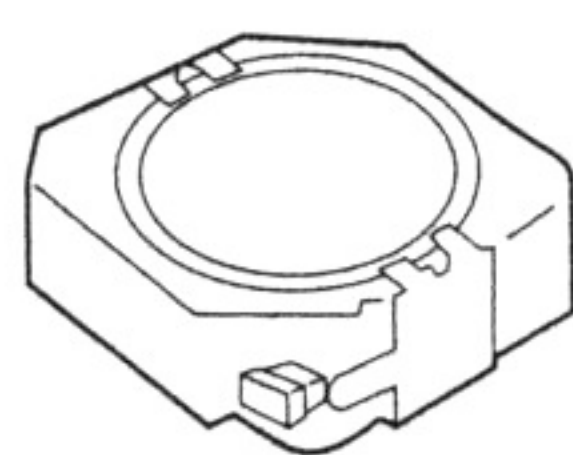
Note: 1. Inductance measured at 100.0KHz, 0.1V without DC current.

2. Rated DC current is the approximate current at which inductance will be decreased by 10% from its initial (zero DC) value or the DC current at which  $\Delta T=40^\circ$ , whichever is lower.

Part Number	Inductance (µH ±20%) <sup>(1)</sup>	DC Resistance @ 25 Ω Max	Rated Current (Amp) <sup>(2)</sup>
AX01-50561	560.0	1.904	0.32
AX01-60100	10.0	0.060	2.60
AX01-60120	12.0	0.070	2.45
AX01-60150	15.0	0.080	2.27
AX01-60180	18.0	0.090	2.15
AX01-60220	22.0	0.100	1.95
AX01-60270	27.0	0.110	1.76
AX01-60330	33.0	0.120	1.50
AX01-60390	39.0	0.140	1.37
AX01-60470	47.0	0.170	1.28
AX01-60560	56.0	0.190	1.17
AX01-60680	68.0	0.220	1.11
AX01-60820	82.0	0.250	1.00
AX01-60101	100.0	0.350	0.97
AX01-60121	120.0	0.400	0.89
AX01-60151	150.0	0.470	0.78
AX01-60181	180.0	0.630	0.72
AX01-60221	220.0	0.730	0.66
AX01-60271	270.0	0.970	0.57
AX01-60331	330.0	1.150	0.52
AX01-60391	390.0	1.300	0.48
AX01-60471	470.0	1.480	0.42
AX01-60561	560.0	1.900	0.33
AX01-60681	680.0	2.250	0.28
AX01-60821	820.0	2.550	0.24

# SMD Power Inductors

AX104R Series SMD Power Shield Inductors



:: Description  
 Slim type  
 Self shielded  
 Height: 4.0mm maximum  
 Low resistance  
 Excellent DC current characteristics

:: Applications  
 Laptop and notebook computers and PDAs  
 DC/DC converters  
 Portable communication equipment  
 Inductor for general purpose use

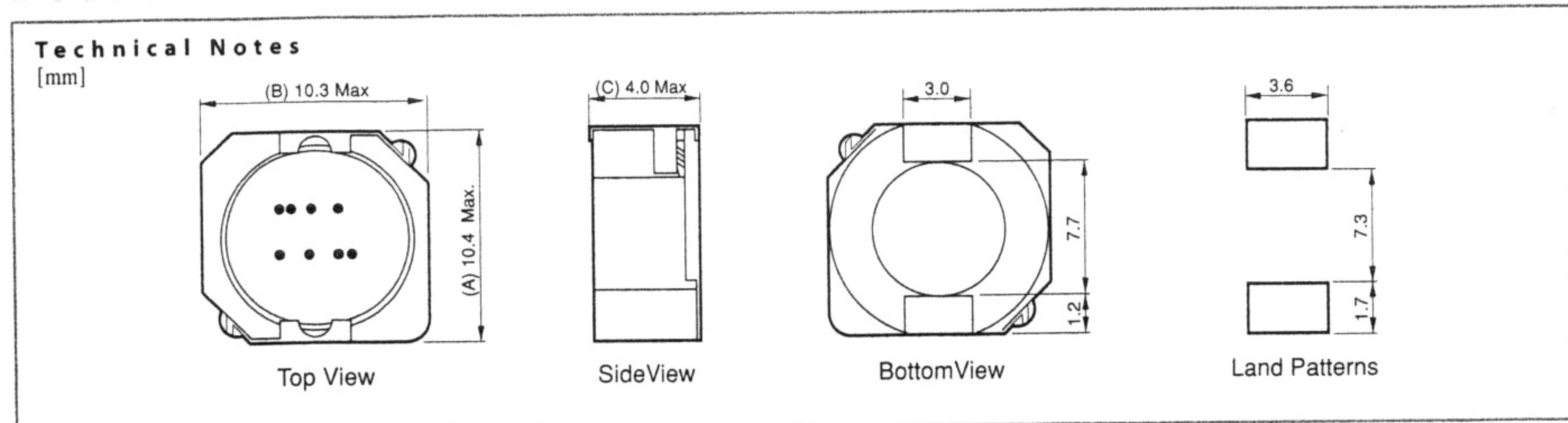
AX104R Series SMD Power Shield Inductors

Model	Inductance <sup>(1)</sup> µH	Rated DC <sup>(2)</sup> Current Amps	DC resistance <sup>(3)</sup> Ω Max
AX104R-1R5	1.5	6.5	8.1m
AX104R-2R5	2.5	6.1	10m
AX104R-4R7	4.7	6.0	15m
AX104R-6R8	6.8	4.8	19.5m
AX104R-8R2	8.2	4.6	25m
AX104R-100	10.0	4.4	35m
AX104R-150	15.0	3.6	50m
AX104R-220	22.0	2.9	75m

Model	Inductance <sup>(1)</sup> µH	Rated DC <sup>(2)</sup> Current Amps	DC resistance <sup>(3)</sup> Ω Max
AX104R-330	33.0	2.30	93m
AX104R-470	47.0	2.10	128m
AX104R-680	68.0	1.50	213m
AX104R-101	100.0	1.35	304m
AX104R-151	150.0	1.15	506m
AX104R-221	220.0	0.92	756m
AX104R-331	330.0	0.70	1.09

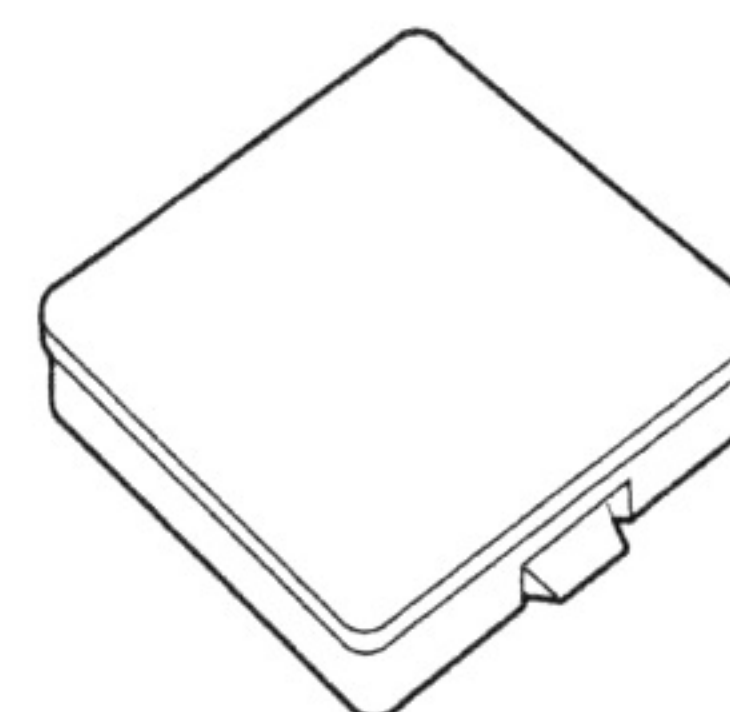
Notes: 1. Inductance measured at 100 kHz 1.0 V without DC current. Tolerance: ±30% (N).  
 2. Rated current is the approximate current at which inductance will be decreased by 35% from its initial (zero DC) value.  
 3. DC Resistance measured at 20°C.

Technical Notes



# SMD Power Inductors

AX02-30 Series SMD Power Shield Inductors



:: Description  
 Slim type  
 Self shielded  
 Height: 6.5mm maximum  
 Low resistance  
 Excellent DC current characteristics

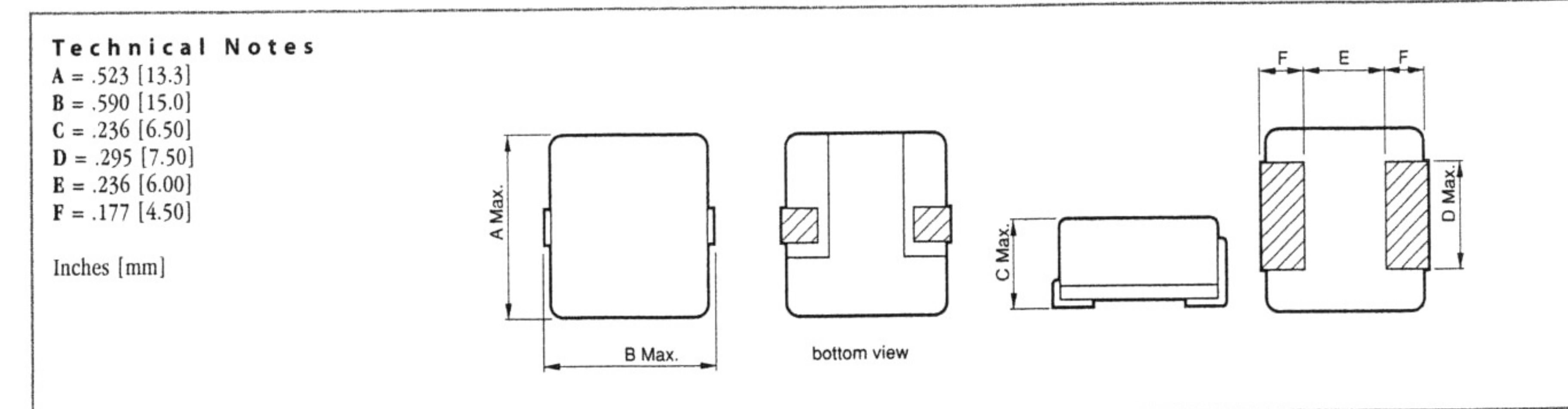
:: Applications  
 Laptop and notebook computers and PDAs  
 DC/DC converters  
 Inductor for general purpose use

AX02-30 Series SMD Power Shield Inductors

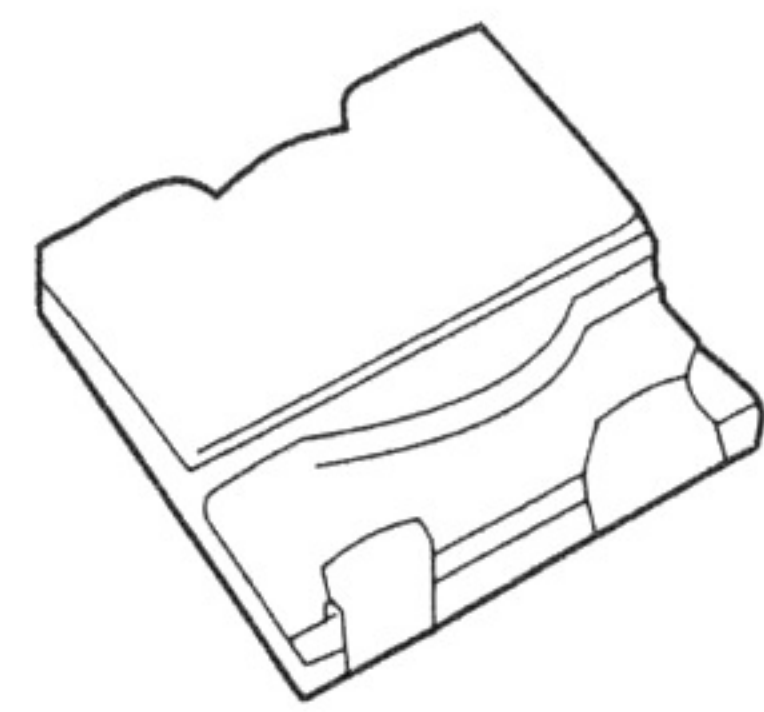
Model	Inductance <sup>(1)</sup> µH ±20%	Rated DC <sup>(2)</sup> Current Amps	The saturation <sup>(3)</sup> DC Current Amps	DC Resistance <sup>(4)</sup> mΩ Max
AX02-300R6	0.6	27.0	40.0	1.25
AX02-301R0	1.0	23.0	34.0	1.70
AX02-301R5	1.5	18.0	30.0	2.30
AX02-302R2	2.2	12.0	24.0	5.10
AX02-303R9	3.9	10.0	18.0	7.20
AX02-304R6	4.6	9.0	14.0	8.30
AX02-306R4	6.4	6.5	16.0	9.60

Notes: 1. Inductance measured at 100 kHz 1.0 V without DC current.  
 2. Rated current is the approximate current at which inductance will be decreased by 15% from its initial (zero DC) value.  
 3. The saturation DC current at which inductance rolls off approximately 30% from its initial value.  
 4. DC Resistance measured at 20°C.

Technical Notes



# SMD Power Inductors

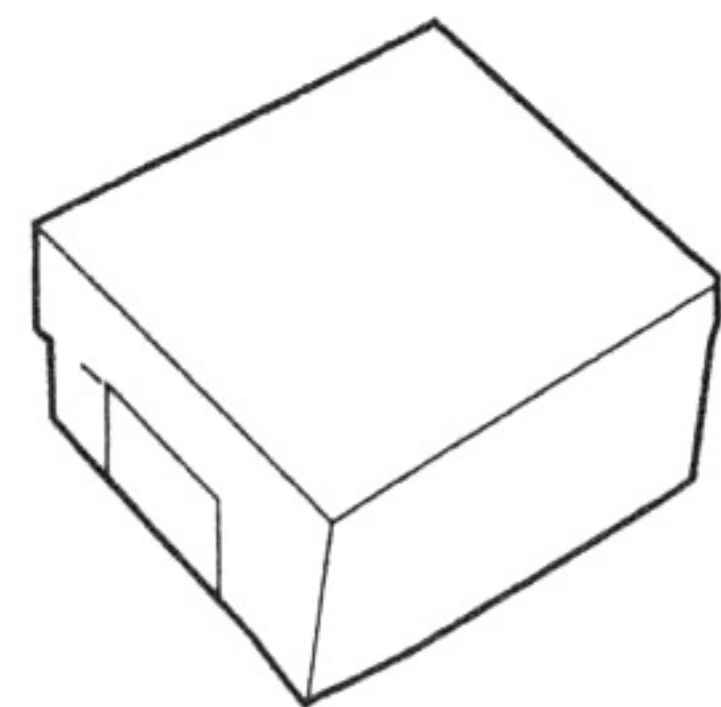
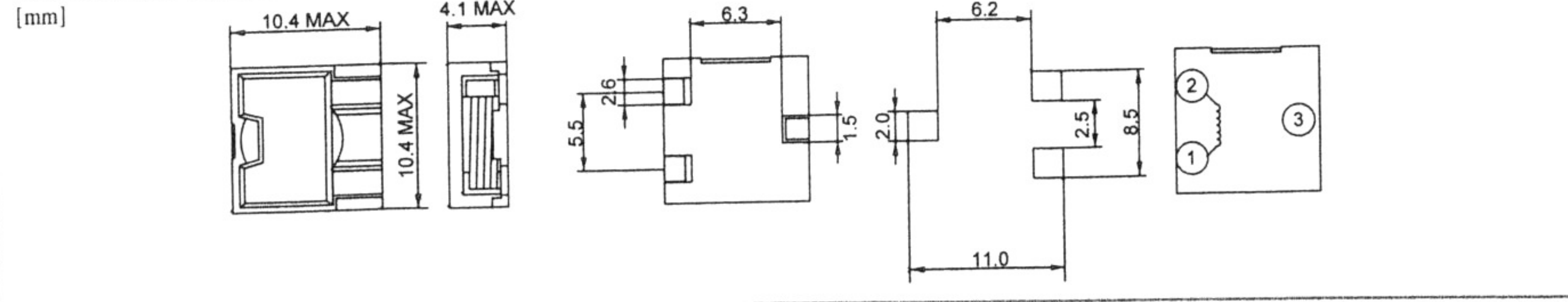


AXFS05 Description  
 Flat wire  
 Height: 4.1mm maximum  
 Low resistance  
 Excellent DC current characteristics

Part Number	Inductance μH±20% (M)	Rated DC <sup>(1)</sup> Current Amps	DC Resistance <sup>(3)</sup> Ω Max
AXFS05-400R22	0.22	25.0	2.00
AXFS05-400R45	0.45	20.0	4.25
AXFS05-400R8	0.80	16.0	6.82
AXFS05-401R5	1.50	13.0	6.82
AXFS05-402R0	2.00	10.0	9.84
AXFS05-403R3	3.30	8.0	9.84
AXFS05-404R7	4.70	5.5	9.84

Notes: 1. Inductance measured at 100kHz 0.1v without DC current.  
 2. Rated current is the approximate current at which inductance will be decreased by 15% from its initial (zero DC) value.  
 3. DC Resistance measured at 20°C.

### Technical Notes

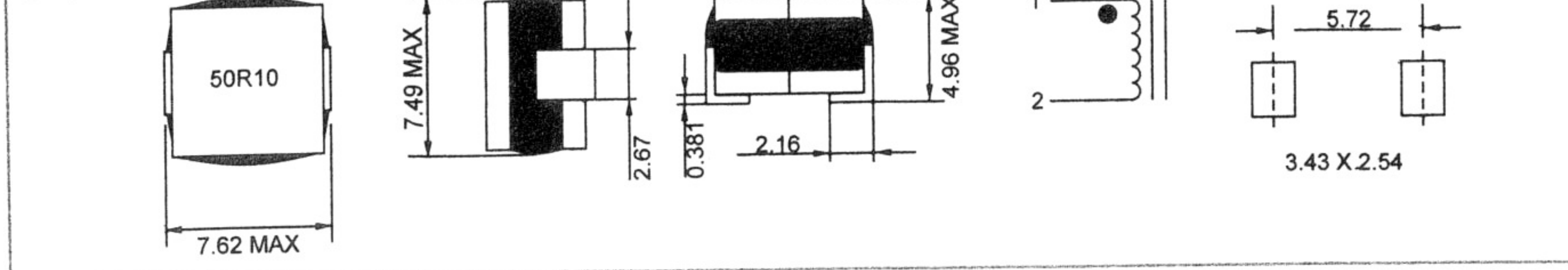


Slim type, Height: 4.96mm maximum,  
 Low resistance, Excellent DC current characteristics

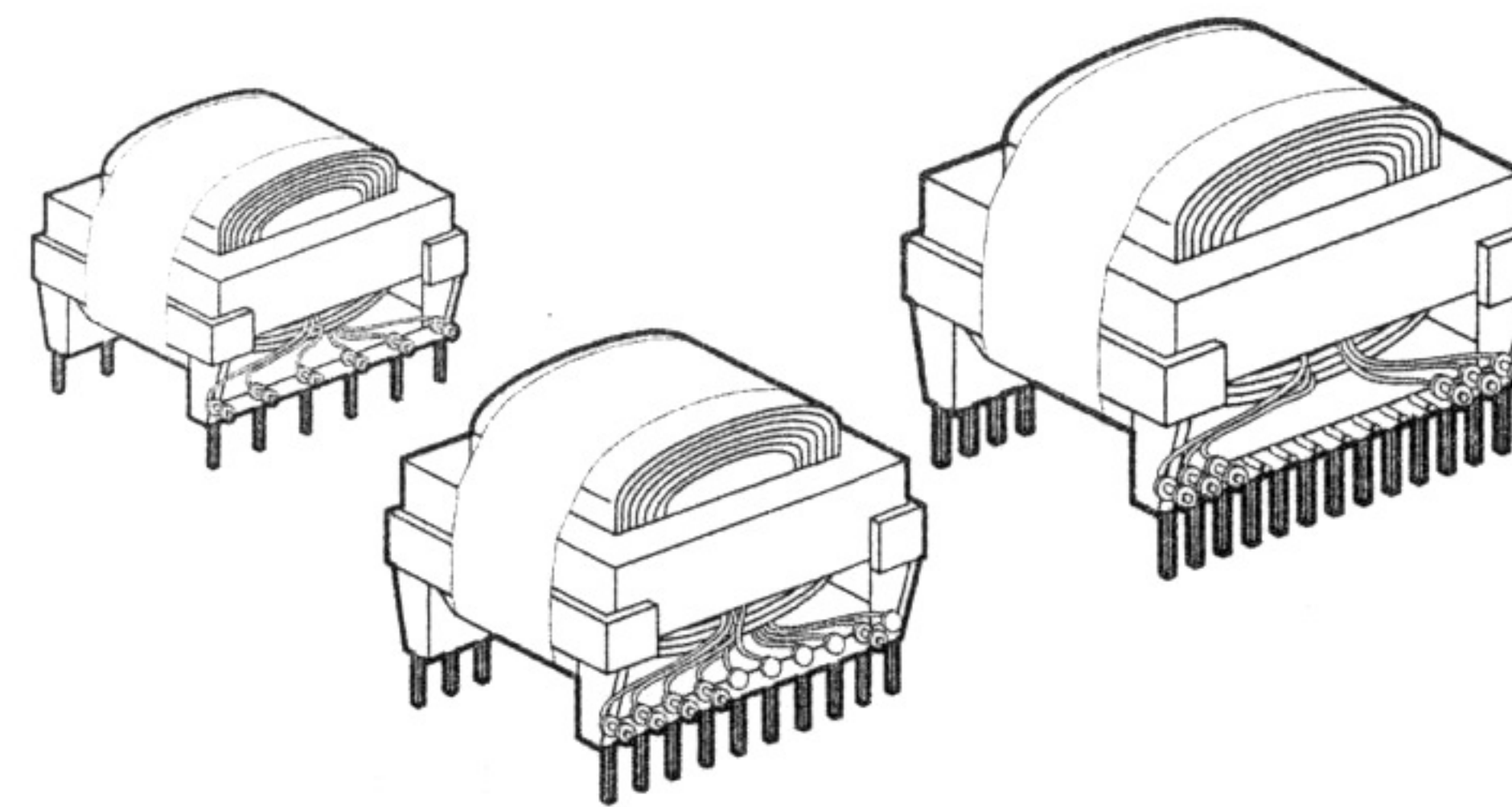
Part Number	Inductance @0 ADC	Inductance @ rated current	Rated current		DCR		Saturation Current		
			ADC	ADC	mohm	ADC	ADC	ADC	
50R10	100	80	46	0.23	0.30	48	46	35	

Notes: 1. Inductance measured at 100kHz 1.0v without DC current. Tolerance: ±10% (K).  
 2. Rated current is the approximate current at which inductance will be decreased by 20% from its initial (zero DC) value.  
 3. DC Resistance measured at 20°C.

### Technical Notes



# Switchmode/High Frequency



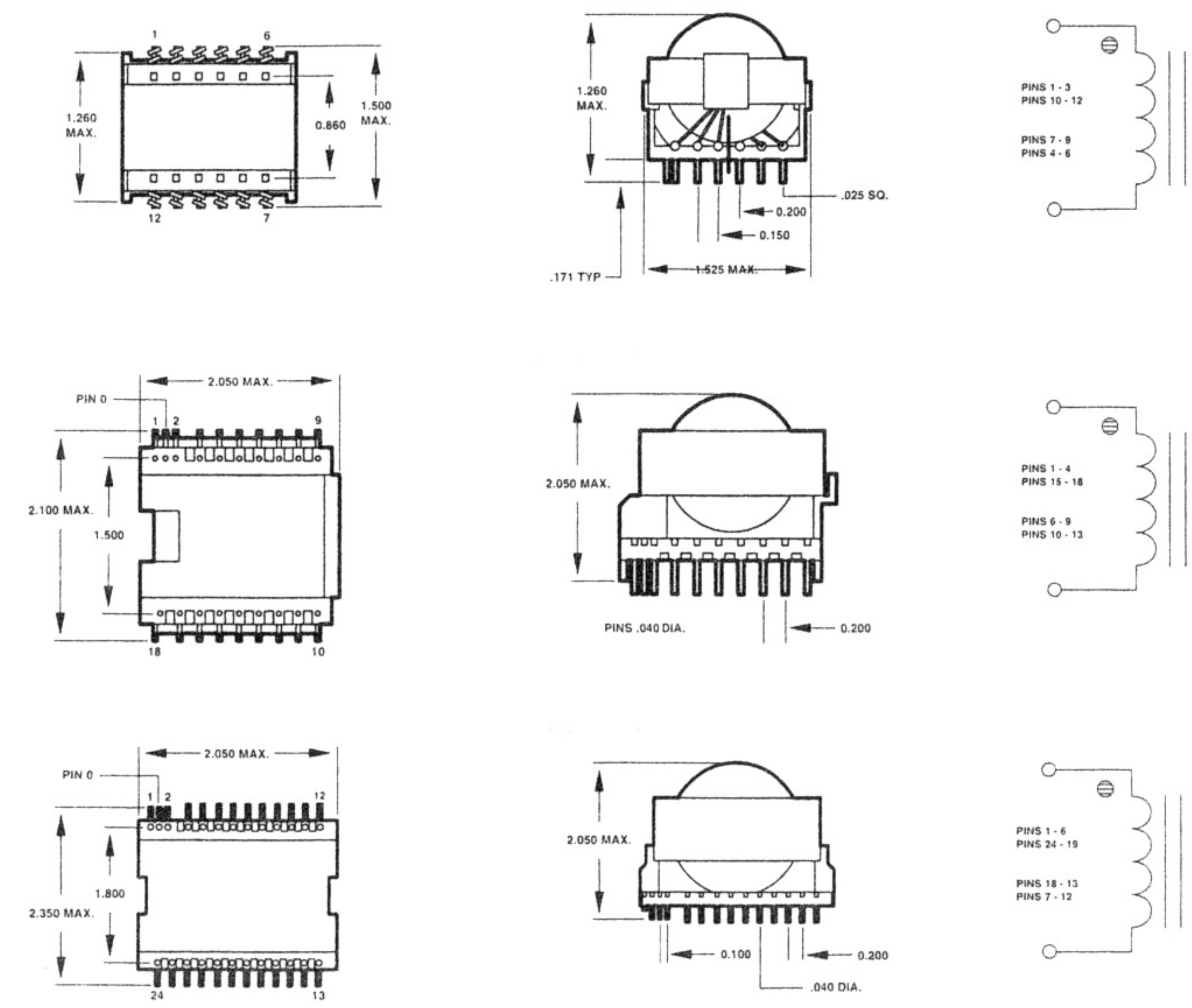
Triad output filter inductors are used in output circuit applications to provide a more constant current source by storing energy. These inductors have exceptional performance characteristics across the entire specification range with their primary function being energy storage. As opposed to other output filter inductor designs offering only a single winding, these devices offer design flexibility so that several outputs can be fed through different windings on the same core.

Operating Frequency: 10KHz - 250 KHz

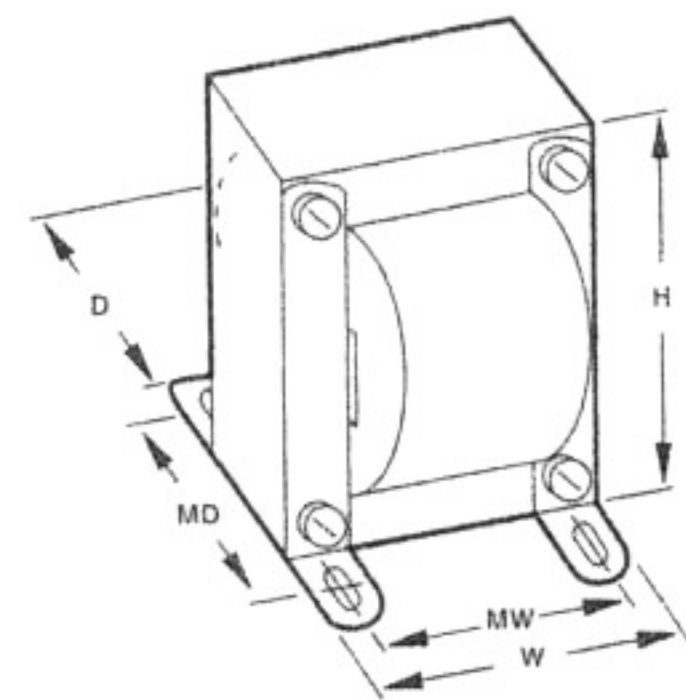
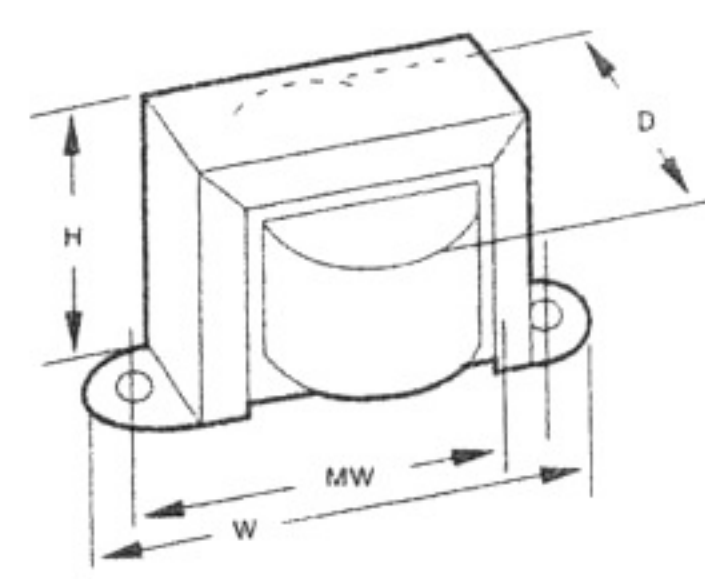
Section	Type No.	Figure	Inductance @ No DC	DC Amps	DC Resistance mOhms	Inductance @ DC Bias	Wt. Lbs.
A	FIE137-1	A	17.9 μH	35.0	2.00	9.0 μH	.20
	FIE137-2		29.7 μH	25.0	4.00	15.5 μH	
B	FIE168-1	B	19.2 μH	70.0	1.00	10.2 μH	.54
	FIE168-2		31.2 μH	50.0	2.00	16.0 μH	
C	FIE220-1	C	11.7 μH	120.0	1.00	5.0 μH	1.03
	FIE220-2		46.8 μH	60.0	3.00	21.3 μH	

### Technical Notes

1. DC resistance ±15%.  
 2. Inductance ±10%.



# Inductors



Triad chokes are manufactured in a wide variety of inductance values and physical configurations. Smoothing chokes are power supply filter chokes having a core with an air gap which prevents saturation at maximum direct current.

**Inductance Ranges:** .005 to 15 H  
**DC Current Ranges:** 10 Ma to 22.5 A  
**Resistance Ranges:** .06 to 3,500 Ohms

### Smoothing Chokes

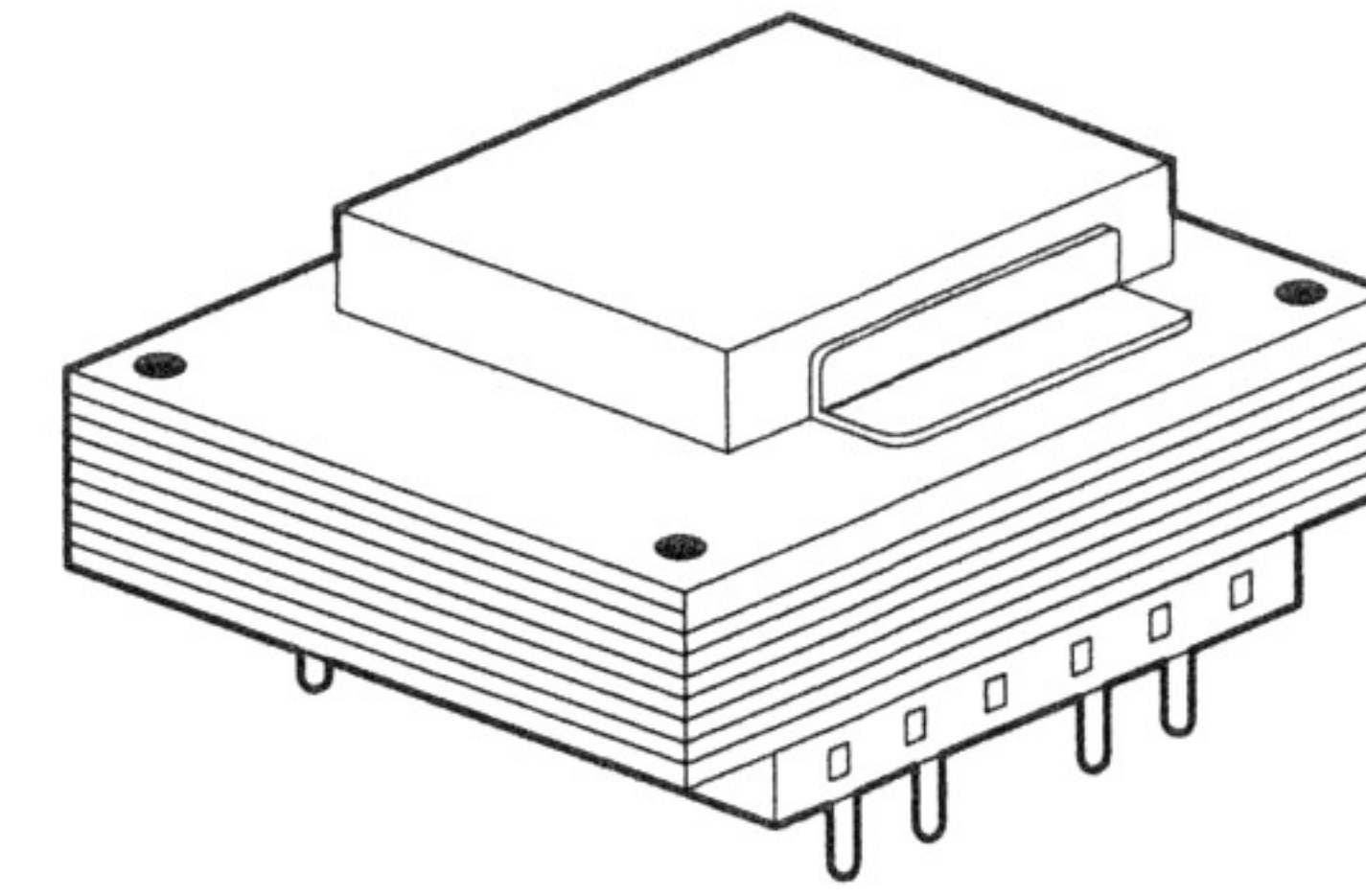
Section	Type No.	Current DC M/A	Inductance†† Henries	Resistance Ohms/	Case Type	Connections	Lead Holes Used	Dimensions			Mounting Dimensions		Wt. Lbs.
								H	W	D	MW	MD	
A	C-85X	10.0	1.500	70.00	X (1)	Leads	•	1 1/4	2 3/4	1 1/4	1 1/4	•	0.40
	C-1X	20.0	15.000	1,000.00	X (1)	Leads	•	1 1/4	2 3/4	1 1/4	1 1/4	•	0.21
	C-3X	50.0	10.000	500.00	X (1)	Leads	•	1 1/4	2 3/4	1 1/4	2 3/4	•	0.60
B	C-8X	75.0	7.000	240.00	X (1)	Leads	•	1 1/4	3 3/4	1 1/4	2 1/4	•	1.00
	C-7X	90.0	10.000	270.00	X (1)	Leads	•	1 1/4	3 3/4	2	2 1/4	•	1.30
C	C-14X	200.0	6.000	150.00	X (1)	Leads	•	2 1/4	4	2 1/4	3 3/4	•	2.30
	C-24X	240.0	1.000	50.00	X (1)	Leads	•	1 3/4	2 3/4	1 1/2	2 3/4	•	0.75
D	C-36X	300.0	0.500	30.00	X (1)	Leads	•	1 3/4	2 3/4	1 1/2	2	•	0.50
E	C-17X	300.0	1.500	40.00	X (1)	Leads	•	2 1/4	3 3/4	2	3 3/4	•	1.60
F	C-40X	600.0	0.320	10.00	X (1)	Leads	•	1 1/4	3 3/4	2	2 1/4	•	1.30
	C-47U	1.0A/2.0A	0.3/0.75§	3.0/0.75	U (2)	Leads	•	3 1/2	2 1/2	3 3/4	2 1/4	2 1/4	4.60
	C-56U	2.0	0.0350	0.79	U (2)	Lugs	•	2 1/4	2 1/4	2	2 1/4	1 1/4	2.00
G	C-49U	5.0A/10.0A	0.032/0.008§	0.19/0.05	U (2)	Leads	•	4 1/4	3 3/4	3 3/4	2 1/4	3 3/4	8.00
	C-59U	12.5A	0.010	0.10	U (2)	Lugs	•	3 1/2	4 1/4	3	3 3/4	2 1/4	6.25
	C-80U	20.0A/40.0A	0.024/0.006§	0.1/0.025	U (7)	Lugs	•	5 1/4	4 1/4	5 1/2	2 1/4	4 1/2	21.25
	C-60U	22.5A	0.005	0.06	U (2)	Lugs	•	3 3/4	4 1/2	4 1/4	3 3/4	3 1/2	12.75

†† = Inductance tolerance -20% +50% § Split winding  
 Mounting hole sizes: (1) = 1/16" (2) = 1/8" x 1/8" (7) = 7/16" x 1/2"

### Technical Notes

- Hi-pot tested at 1,500 VRMS.
- Connections by leads or solder lugs.
- Inductance tolerance -20% +50%.

# Power Transformers



Triad PC mount World Series transformers incorporate a dual bobbin construction with an insulating shroud, both made of a high temperature material that exceeds UL flammability requirements. These units are designed with very high isolation between the primary and secondary, and also, between each winding and the core. Since the dual bobbin construction effectively reduces capacitance, electrostatic shielding is not required. PC mount transformers are available with ratings from 2.5 VA 56.0 VA and have dimensionally accurate pin placement for through hole PC board mounting. All World Series transformers meet U.S. and International standards including CSA, IEC, VDE and UL requirements, and therefore have universal application.

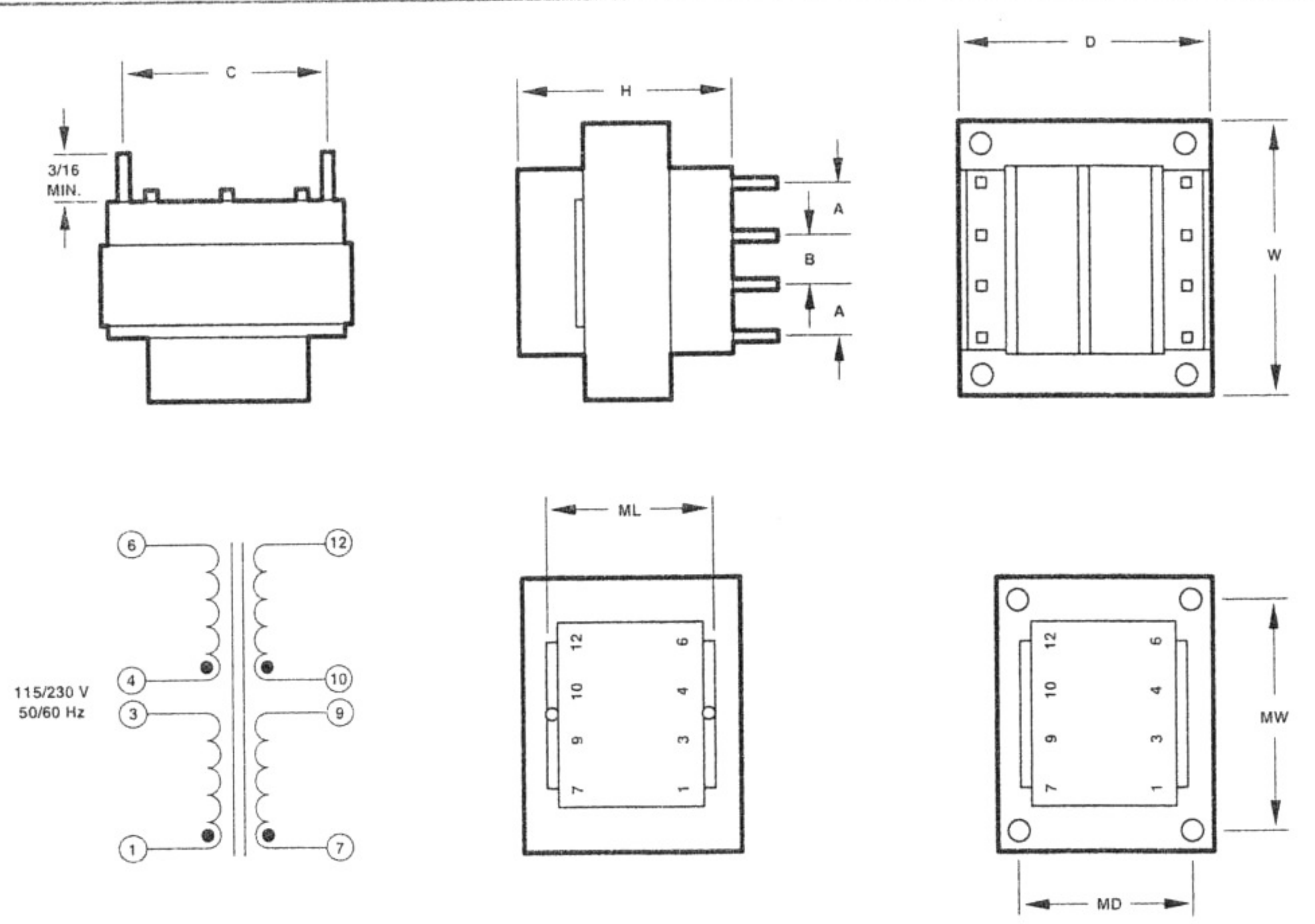
**Primary:** 115/230 V, 50/60 Hz **VA Ranges:** 2.5 to 56.0

Section	Type No.	VA	Secondary		Dimensions					Pin Dim.	Mounting			WT Lbs.	
			Series	Parallel	H	W	D	A	B		C	ML	MD		MW
A	VPP10-250*	2.5	10.0V CT @ 0.25A	5.0V @ 0.5A	1 1/4	1 1/4	1 3/4	.200	.250	1.000	0.025 Sq.	1 1/4	•	•	0.25
	VPP10-500	5.0	10.0V CT @ 0.5A	5.0V @ 1.0A	1 1/4	1 1/4	1 3/4	.200	.400	1.000	0.025 Sq.	1 1/4	•	•	0.37
	VPP10-1000	10.0	10.0V CT @ 1.0A	5.0V @ 2.0A	1 1/4	1 1/4	1 3/4	.200	.400	1.140	0.036 Sq.	1 1/4	•	•	0.53
	VPP10-2000	20.0	10.0V CT @ 2.0A	5.0V @ 4.0A	1 1/4	2 1/4	1 3/4	.400	.400	1.460	0.036 Sq.	1 1/2	•	•	0.90
	VPP10-3000	30.0	10.0V CT @ 3.0A	5.0V @ 6.0A	1 1/4	2 1/4	2 1/4	.550	.275	1.680	0.045 Sq.	•	1 1/4	2 1/4	1.15
	VPP10-5600	56.0	10.0V CT @ 5.6A	5.0V @ 11.2A	1 3/4	3	2 1/2	.600	.300	1.900	0.045 Sq.	•	2	2 1/2	1.70
B	VPP12-200*	2.5	12.6V CT @ 0.2A	6.3V @ 0.4A	1 1/4	1 1/4	1 3/4	.200	.250	1.000	0.025 Sq.	1 1/4	•	•	0.25
	VPP12-400	5.0	12.6V CT @ 0.4A	6.3V @ 0.8A	1 1/4	1 1/4	1 3/4	.200	.400	1.000	0.025 Sq.	1 1/4	•	•	0.37
	VPP12-800	10.0	12.6V CT @ 0.8A	6.3V @ 1.6A	1 1/4	1 1/4	1 3/4	.200	.400	1.140	0.036 Sq.	1 1/4	•	•	0.53
	VPP12-1600	20.0	12.6V CT @ 1.6A	6.3V @ 3.2A	1 1/4	2 1/4	1 3/4	.400	.400	1.460	0.036 Sq.	1 1/2	•	•	0.90
	VPP12-2400	30.0	12.6V CT @ 2.4A	6.3V @ 4.8A	1 1/4	2 1/4	2 1/4	.550	.275	1.680	0.045 Sq.	•	1 1/4	2 1/4	1.15
	VPP12-4400	56.0	12.6V CT @ 4.4A	6.3V @ 8.8A	1 3/4	3	2 1/2	.600	.300	1.900	0.045 Sq.	•	2	2 1/2	1.70
C	VPP16-150*	2.5	16.0V CT @ 0.15A	8.0V @ 0.3A	1 1/4	1 1/4	1 3/4	.200	.250	1.000	0.025 Sq.	1 1/4	•	•	0.25
	VPP16-310	5.0	16.0V CT @ 0.31A	8.0V @ 0.62A	1 1/4	1 1/4	1 3/4	.200	.400	1.000	0.025 Sq.	1 1/4	•	•	0.37
	VPP16-620	10.0	16.0V CT @ 0.62A	8.0V @ 1.25A	1 1/4	1 1/4	1 3/4	.200	.400	1.140	0.036 Sq.	1 1/4	•	•	0.53
	VPP16-1250	20.0	16.0V CT @ 1.25A	8.0V @ 2.5A	1 1/4	2 1/4	1 3/4	.400	.400	1.460	0.036 Sq.	1 1/2	•	•	0.90
	VPP16-1900	30.0	16.0V CT @ 1.9A	8.0V @ 3.8A	1 1/4	2 1/4	2 1/4	.550	.275	1.680	0.045 Sq.	•	1 1/4	2 1/4	1.15
	VPP16-3500	56.0	16.0V CT @ 3.5A	8.0V @ 7.0A	1 3/4	3	2 1/2	.600	.300	1.900	0.045 Sq.	•	2	2 1/2	1.70
D	VPP20-120*	2.5	20.0V CT @ 0.12A	10.0V @ 0.24A	1 1/4	1 1/4	1 3/4	.200	.250	1.000	0.025 Sq.	1 1/4	•	•	0.25
	VPP20-250	5.0	20.0V CT @ 0.25A	10.0V @ 0.5A	1 1/4	1 1/4	1 3/4	.200	.400	1.000	0.025 Sq.	1 1/4	•	•	0.37
	VPP20-500	10.0	20.0V CT @ 0.5A	10.0V @ 1.0A	1 1/4	1 1/4	1 3/4	.200	.400	1.140	0.036 Sq.	1 1/4	•	•	0.53
	VPP20-1000	20.0	20.0V CT @ 1.0A	10.0V @ 2.0A	1 1/4	2 1/4	1 3/4	.400	.400	1.460	0.036 Sq.	1 1/2	•	•	0.90
	VPP20-1500	30.0	20.0V CT @ 1.5A	10.0V @ 3.0A	1 1/4	2 1/4	2 1/4	.550	.275	1.680	0.045 Sq.	•	1 1/4	2 1/4	1.15
	VPP20-2800	56.0	20.0V CT @ 2.8A	10.0V @ 5.6A	1 3/4	3	2 1/2	.600	.300	1.900	0.045 Sq.	•	2	2 1/2	1.70
E	VPP24-100*	2.5	24.0V CT @ 0.1A	12.0V @ 0.2A	1 1/4	1 1/4	1 3/4	.200	.250	1.000	0.025 Sq.	1 1/4	•	•	0.25
	VPP24-210	5.0	24.0V CT @ 0.21A	12.0V @ 0.42A	1 1/4	1 1/4	1 3/4	.200	.400	1.000	0.025 Sq.	1 1/4	•	•	0.37
	VPP24-420	10.0	24.0V CT @ 0.42A	12.0V @ 0.84A	1 1/4	1 1/4	1 3/4	.200	.400	1.140	0.036 Sq.	1 1/4	•	•	0.53
	VPP24-830	20.0	24.0V CT @ 0.83A	12.0V @ 1.66A	1 1/4	2 1/4	1 3/4	.400	.400	1.460	0.036 Sq.	1 1/2	•	•	0.90
	VPP24-1250	30.0	24.0V CT @ 1.25A	12.0V @ 2.50A	1 1/4	2 1/4	2 1/4	.550	.275	1.680	0.045 Sq.	•	1 1/4	2 1/4	1.15
	VPP24-2330	56.0	24.0V CT @ 2.33A	12.0V @ 4.66A	1 3/4	3	2 1/2	.600	.300	1.900	0.045 Sq.	•	2	2 1/2	1.70
F	VPP28-090*	2.5	28.0V CT @ 0.09A	14.0V @ 0.18A	1 1/4	1 1/4	1 3/4	.200	.250	1.000	0.025 Sq.	1 1/4	•	•	0.25
	VPP28-180	5.0	28.0V CT @ 0.18A	14.0V @ 0.36A	1 1/4	1 1/4	1 3/4	.200	.400	1.000	0.025 Sq.	1 1/4	•	•	0.37
	VPP28-360	10.0	28.0V CT @ 0.36A	14.0V @ 0.72A	1 1/4	1 1/4	1 3/4	.200	.400	1.140	0.036 Sq.	1 1/4	•	•	0.53
	VPP28-720	20.0	28.0V CT @ 0.72A	14.0V @ 1.44A	1 1/4	2 1/4	1 3/4	.400	.400	1.460	0.036 Sq.	1 1/2	•	•	0.90
	VPP28-1060	30.0	28.0V CT @ 1.06A	14.0V @ 2.12A	1 1/4	2 1/4	2 1/4	.550	.275	1.680	0.045 Sq.	•	1 1/4	2 1/4	1.15
	VPP28-2000	56.0	28.0V CT @ 2.0A	14.0V @ 4.0A	1 3/4	3	2 1/2	.600	.300	1.900	0.045 Sq.	•	2	2 1/2	1.70
G	VPP36-070*	2.5	36.0V CT @ 0.07A	18.0V @ 0.14A	1 1/4	1 1/4	1 3/4	.200	.250	1.000	0.025 Sq.	1 1/4	•	•	0.25
	VPP36-140	5.0	36.0V CT @ 0.14A	18.0V @ 0.28A	1 1/4	1 1/4	1 3/4	.200	.400	1.000	0.025 Sq.	1 1/4	•	•	0.37
	VPP36-280	10.0	36.0V CT @ 0.28A	18.0V @ 0.56A	1 1/4	1 1/4	1 3/4	.200	.400	1.140	0.036 Sq.	1 1/4	•	•	0.53
	VPP36-560	20.0	36.0V CT @ 0.56A	18.0V @ 1.12A	1 1/4	2 1/4	1 3/4	.400	.400	1.460	0.036 Sq.	1 1/2	•	•	0.90
	VPP36-820	30.0	36.0V CT @ 0.82A	18.0V @ 1.64A	1 1/4	2 1/4	2 1/4	.550	.275	1.680	0.045 Sq.	•	1 1/4	2 1/4	1.15
	VPP36-1560	56.0	36.0V CT @ 1.56A	18.0V @ 3.12A	1 3/4	3	2 1/2	.600	.300	1.900	0.045 Sq.	•	2	2 1/2	1.70

CT = Center Tap \* Note: All 2.5 VA units are Class 2 UL File: E65390.

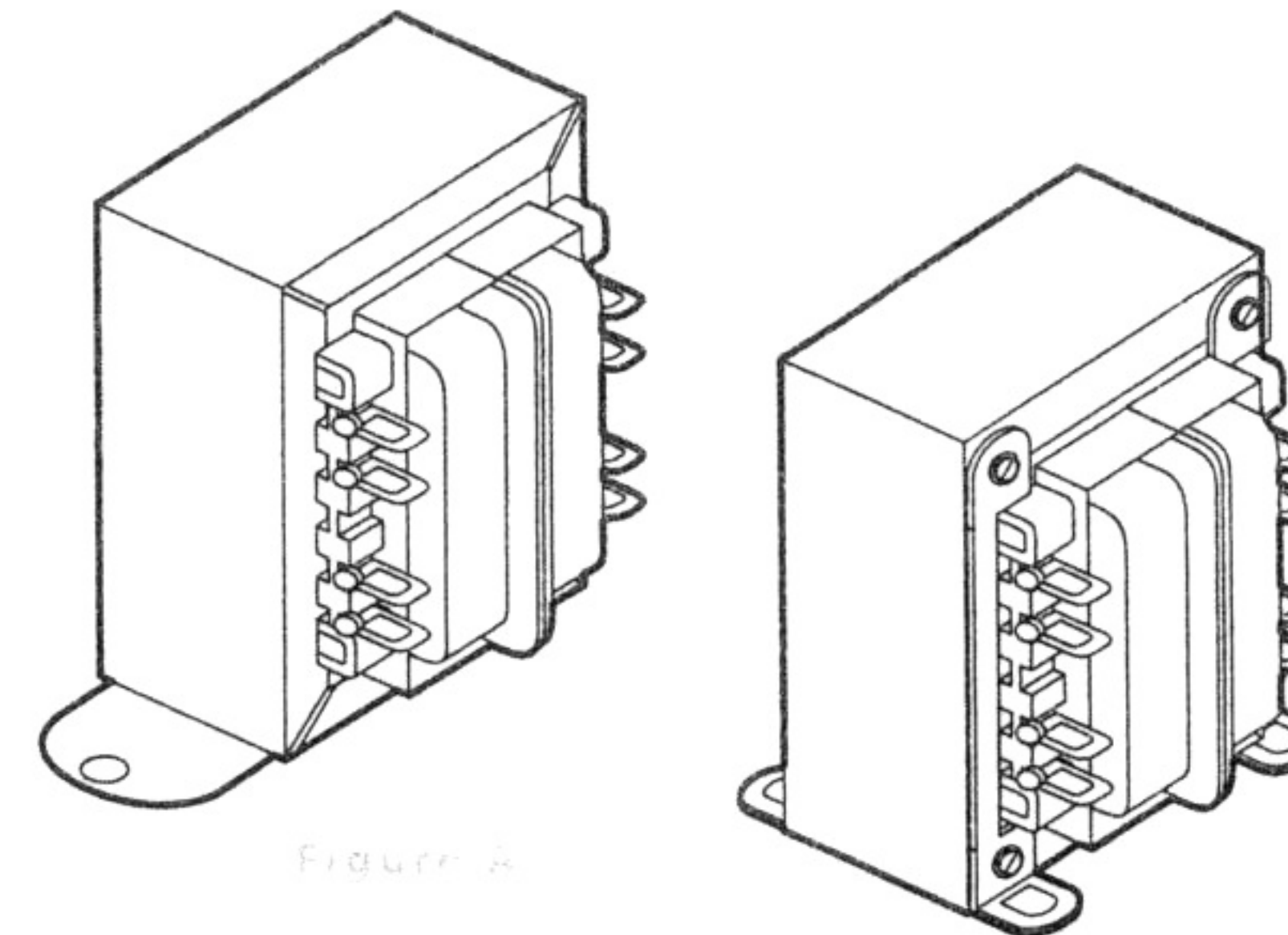
**Technical Notes**

1. Hi-pot tested at 4,000 VRMS.
2. Both primary and secondary coils may be connected as either series or parallel, but both must be used simultaneously.



*The Sales, Service and Technical professionals at Triad Magnetics have over 100 years combined experience in the magnetics industry. This translates to solutions you can count on for your power, switching and filtering applications.*

# Power Transformers



Triad chassis mount World Series transformers are designed to meet U.S. and International standards including CSA, IEC, VDE and UL requirements. The transformers consist of a dual bobbin design positioned inside an insulating shroud and constructed with UL approved high temperature material. This design eliminates the need for electrostatic shielding since there is minimal capacitance between coils when using a dual bobbin configuration. The primary and secondary are both electrically isolated from each other, and from the core itself. Chassis mount World Series transformers are available in sizes ranging from 25 VA to 175 VA, and are equipped with convenient "quick connect" terminations.

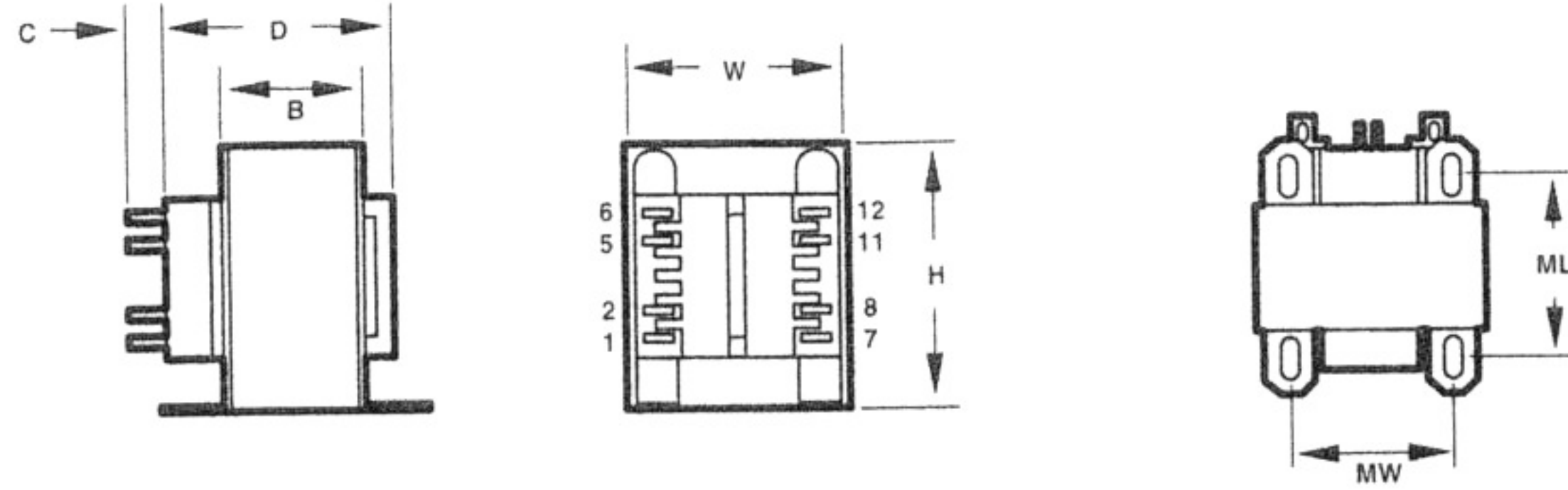
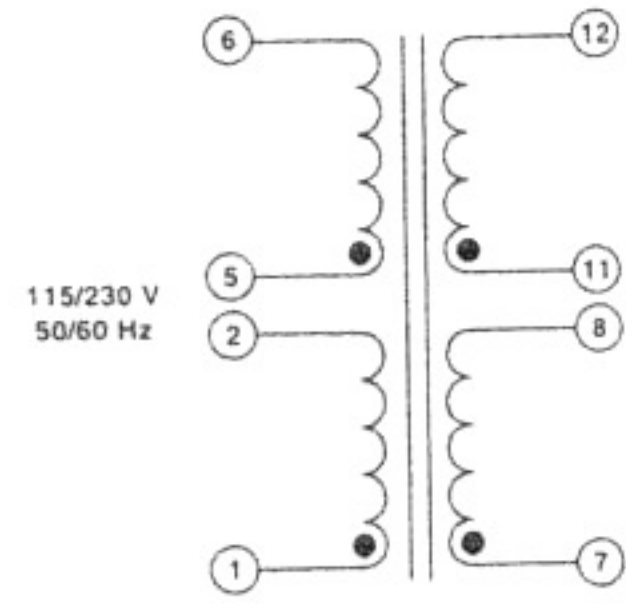
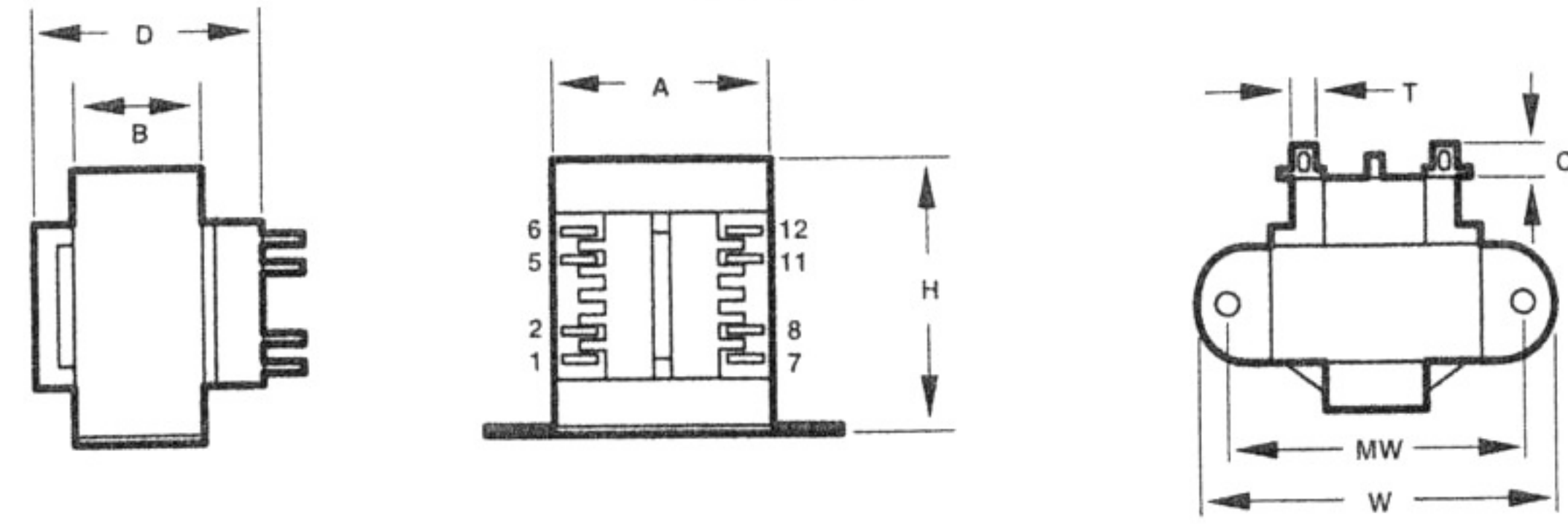
Primary: 115/230 V, 50/60 Hz

Section	Type No.	VA	Secondary		Dimensions							Mounting		Wt. Lbs.		
			Series	Parallel	H	W	D	A	B	C	T	Figure	MW		ML	
A	VPS10-2500	25	10.0V CT @ 2.5A	5.0V @ 5.0A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS10-4300	43	10.0V CT @ 4.3A	5.0V @ 8.6A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS10-8000	80	10.0V CT @ 8.0A	5.0V @ 16.0A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS10-13000	130	10.0V CT @ 13.0A	5.0V @ 26.0A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS10-17500	175	10.0V CT @ 17.5A	5.0V @ 35.0A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50
B	VPS12-2000	25	12.6V CT @ 2.0A	6.3V @ 4.0A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS12-3400	43	12.6V CT @ 3.4A	6.3V @ 6.8A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS12-6300	80	12.6V CT @ 6.3A	6.3V @ 12.6A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS12-10300	130	12.6V CT @ 10.3A	6.3V @ 20.6A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS12-14000	175	12.6V CT @ 14.0A	6.3V @ 28.0A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50
C	VPS16-1600	25	16.0V CT @ 1.6A	8.0V @ 3.2A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS16-2700	43	16.0V CT @ 2.7A	8.0V @ 5.4A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS16-5000	80	16.0V CT @ 5.0A	8.0V @ 10.0A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS16-8100	130	16.0V CT @ 8.1A	8.0V @ 16.2A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS16-11000	175	16.0V CT @ 11.0A	8.0V @ 22.0A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50
D	VPS20-1250	25	20.0V CT @ 1.25A	10.0V @ 2.5A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS20-2200	43	20.0V CT @ 2.2A	10.0V @ 4.4A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS20-4000	80	20.0V CT @ 4.0A	10.0V @ 8.0A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS20-6500	130	20.0V CT @ 6.5A	10.0V @ 13.0A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS20-8800	175	20.0V CT @ 8.8A	10.0V @ 17.6A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50
E	VPS24-1000	25	24.0V CT @ 1.0A	12.0V @ 2.0A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS24-1800	43	24.0V CT @ 1.8A	12.0V @ 3.6A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS24-3300	80	24.0V CT @ 3.3A	12.0V @ 6.6A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS24-5400	130	24.0V CT @ 5.4A	12.0V @ 10.8A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS24-7300	175	24.0V CT @ 7.3A	12.0V @ 14.6A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50
F	VPS28-900	25	28.0V CT @ 0.9A	14.0V @ 1.8A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS28-1500	43	28.0V CT @ 1.5A	14.0V @ 3.0A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS28-2800	80	28.0V CT @ 2.8A	14.0V @ 5.6A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS28-4600	130	28.0V CT @ 4.6A	14.0V @ 9.2A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS28-6250	175	28.0V CT @ 6.25A	14.0V @ 12.5A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50
G	VPS36-700	25	36.0V CT @ 0.7A	18.0V @ 1.4A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS36-1200	43	36.0V CT @ 1.2A	18.0V @ 2.4A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS36-2200	80	36.0V CT @ 2.2A	18.0V @ 4.4A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS36-3600	130	36.0V CT @ 3.6A	18.0V @ 7.2A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS36-4800	175	36.0V CT @ 4.8A	18.0V @ 9.6A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50
H	VPS56-2300	80	36.0V CT @ 2.3A	28.0V @ 4.6A	3 1/4"	2 1/2"	3 1/8"	2 1/4"	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.2
I	VPS230-110	25	230.0V CT @ 0.11A	115.0V @ 0.22A	2 1/16"	2 1/16"	1 1/16"	2	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.25
	VPS230-190	43	230.0V CT @ 0.19A	115.0V @ 0.38A	2 1/16"	3 1/8"	2	2 1/16"	1 1/2"	1 1/8"	1/16"	1/16"	A	2 1/2"	•	1.60
	VPS230-350	80	230.0V CT @ 0.35A	115.0V @ 0.7A	3	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2	2 1/2"	2.80
	VPS230-570	130	230.0V CT @ 0.57A	115.0V @ 1.14A	3 1/2"	2 1/2"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	4.10
	VPS230-760	175	230.0V CT @ 0.76A	115.0V @ 1.52A	3 3/4"	3 3/8"	2 1/16"	•	1 1/2"	1 1/8"	1/16"	1/16"	B	2 1/2"	2 1/2"	5.50

CT = Center Tap Mounting Hole Sizes: 25 VA, 43 VA = 1/16" 80 VA, 130 VA, 175 VA = 3/16" x 1/8"

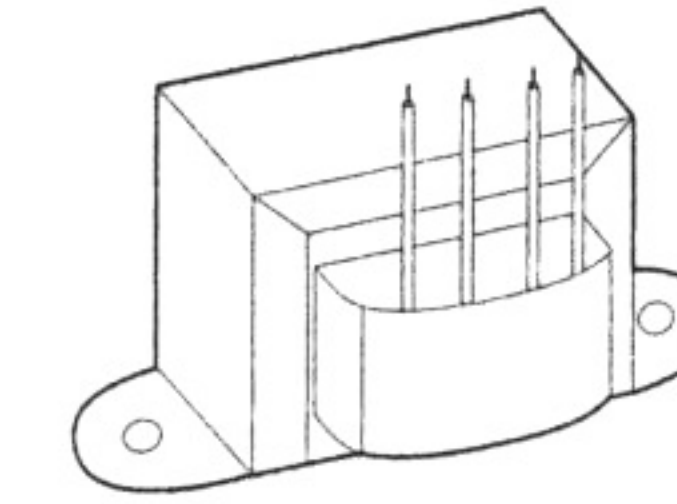
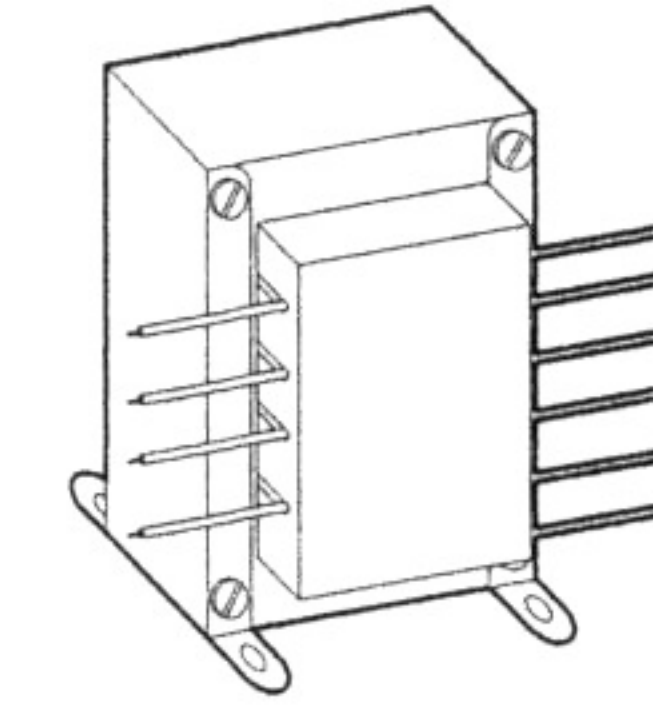
**Technical Notes**

- 1. Hi-pot tested at 4,000 VRMS.
- 2. Both primary and secondary coils may be connected as either series or parallel, but both must be used simultaneously.



Triad Magnetics is a global leader and trusted name in magnetics for more than 50 years.

# Power Transformers



Triad International Series transformers are constructed with European style split bobbins to meet International safety agency standards. The split bobbin construction reduces interwinding capacitance and eliminates the need for electrostatic shielding.

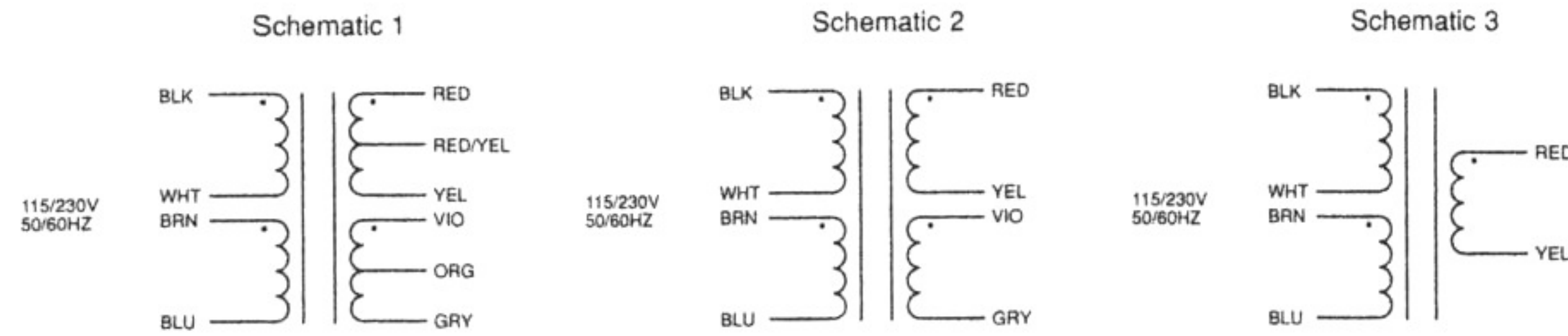
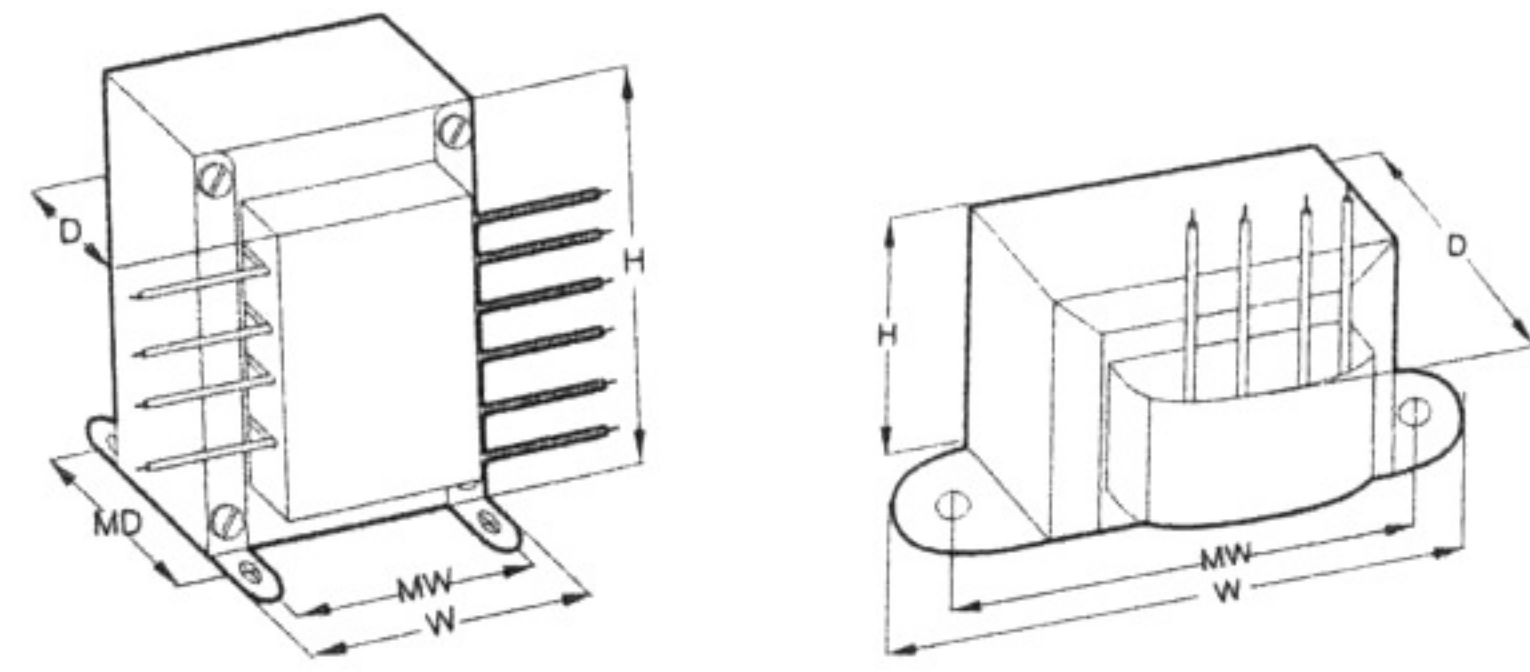
Available in sizes from 5VA to 56 VA 115 V / 230 V 50/60 Hz Primary windings; 3,500 V isolation between primary and secondary; designed with 6mm creepage distance primary to secondary.

Section	Part Number	VA	Secondary Series Connected		Secondary Parallel Connected		Center Tap	Schematic	Case Type	Dimensions			Mounting Dimensions		Weight Lbs.
			Volts	Amps	Volts	Amps				H	W	D	MW	MD	
A	VPL10-500	5	10.0	0.500	5.00	1.000	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL12-400	5	12.6	0.390	6.30	0.780	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL14-360	5	14.0	0.360	7.00	0.710	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL16-300	5	16.0	0.310	8.00	0.620	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL20-250	5	20.0	0.250	10.00	0.500	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL24-210	5	24.0	0.210	12.00	0.420	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL26-190	5	26.8	0.190	13.40	0.370	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL28-180	5	28.0	0.180	14.00	0.360	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
	VPL36-140	5	36.0	0.140	18.00	0.280	N	2	X	1 1/8"	2 1/4"	1 7/8"	2	.	0.4
B	VPL2-4000	10	2.5	4.000	1.25	8.000	N	2	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
	VPL10-1000	10	10.0	1.000	5.00	2.000	N	2	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
	VPL12-800	10	12.6	0.790	6.30	1.590	N	1	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
	VPL16-600	10	16.0	0.630	8.00	1.260	N	2	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
	VPL20-500	10	20.0	0.500	10.00	1.000	N	2	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
	VPL24-400	10	24.0	0.410	12.00	0.820	N	2	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
	VPL28-350	10	28.0	0.350	14.00	0.700	N	2	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
C	VPL36-300	10	36.0	0.280	18.00	0.560	N	2	X	1 1/4"	2 1/2"	1 3/4"	2 1/2"	.	0.7
	VPL2-10000	25	2.5	10.000	1.25	20.000	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL10-2500	25	10.0	2.500	5.00	5.000	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL12-2000	25	12.6	1.980	6.30	3.960	Y	1	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL16-1600	25	16.0	1.570	8.00	3.130	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL20-1200	25	20.0	1.250	10.00	2.500	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL24-1100	25	24.0	1.040	12.00	2.080	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL25-1000	25	25.2	0.990	12.60	1.980	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL26-930	25	26.8	0.930	13.40	1.860	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
D	VPL28-900	25	28.0	0.890	14.00	1.790	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL36-700	25	36.0	0.700	18.00	1.400	N	2	X	1 1/2"	3 1/4"	2 1/4"	2 3/4"	.	1.3
	VPL10-5000	50	10.0	5.000	5.00	10.000	N	2	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL12-4000	50	12.6	3.970	6.30	7.940	Y	1	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL16-3100	50	16.0	3.125	8.00	6.250	N	2	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL20-2500	50	20.0	2.500	10.00	5.000	N	2	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL24-2000	50	24.0	2.083	12.00	4.166	N	2	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
E	VPL25-1900	50	25.2	1.984	.	.	N	3	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL26-1800	50	26.8	1.866	.	.	N	3	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL28-1700	50	28.0	1.786	14.00	3.572	N	2	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL36-1400	50	36.0	1.389	18.00	2.778	N	2	X	2 1/8"	4"	2 1/2"	3 3/8"	.	2.3
	VPL28-2000	56	28.0	2.000	14.00	4.000	Y	1	U	3 1/8"	2 3/4"	2 1/4"	2"	2 1/4"	2.7

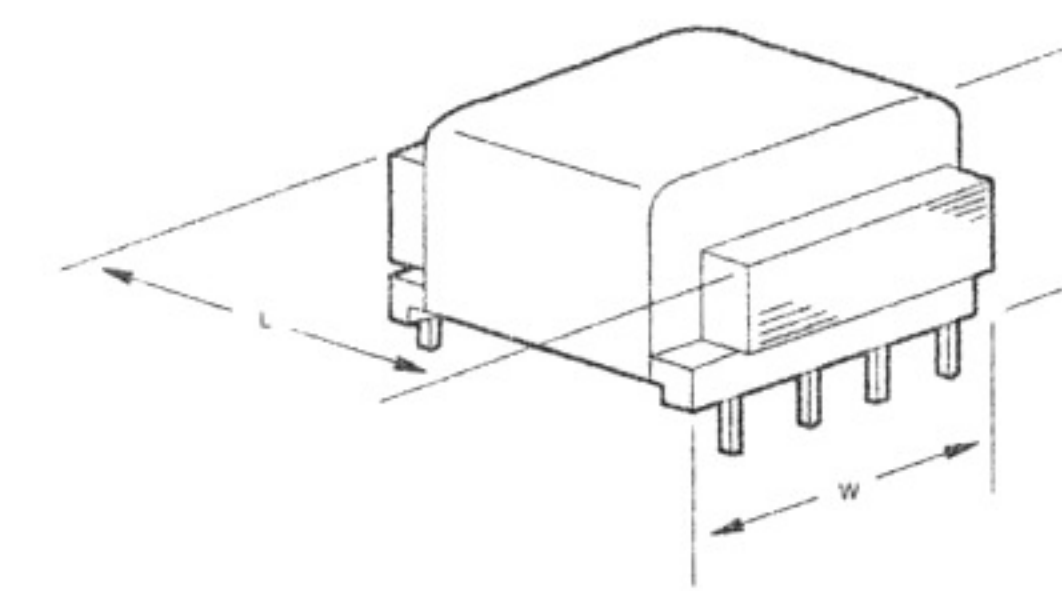
Technical Note: Primary and secondary windings are designed to be connected in Series or Parallel. Windings are not intended to be used independently.

**Technical Notes**

1. Primary and secondary windings are designed to be connected in series or parallel. Windings are not intended to be used independently.



# Power Transformers



The Triad Flat pack power transformer is designed to meet the needs of lower clearance PC board and solid state power designs. These units can also be used for control and instrumentation applications. Voltages and currents were chosen for widely used power applications. It is offered in a dual primary and dual secondary configuration.

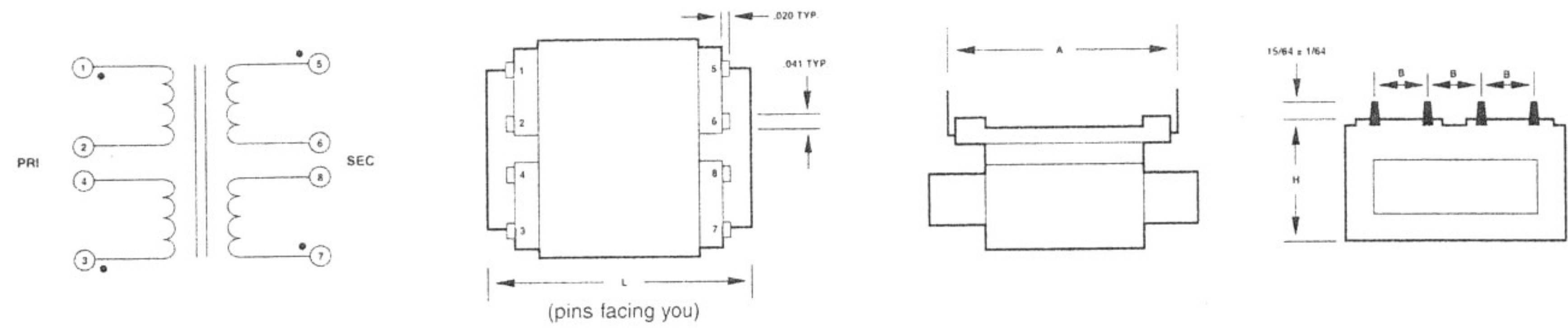
**Primary:** 115/230 V, 50/60 Hz **Hi Pot Tested:** 2,000 VRMS **Low Profile:** Allows 3/4" card spacing for 2.5 VA units; Allows 1" card spacing for 6 VA units; Allows 1 1/4" card spacing for 12 VA units; Allows 1 1/2" card spacing for 24 VA and 48 VA units.

Section	Type No.	VA	Secondary		Dimensions					Wt. Oz.
			Series	Parallel	H	W	L	A	B	
A	FP10-250	2.5	10.0V CT @ 0.25A	5.0V @ 0.5A	0.650	1.562	1.875	1.600	0.375	5
	FP12-200		12.6V CT @ 0.2A	6.3V @ 0.4A						
	FP16-150		16.0 CT @ 0.15A	8.0V @ 0.3A						
	FP20-125		20.0 CT @ 0.125A	10.0V @ 0.25A						
	FP24-100		24.0 CT @ 0.1A	12.0V @ 0.2A						
	FP30-85		30.0V CT @ 0.08A	15.0V @ 0.16A						
	FP34-75		34.0V CT @ 0.075A	17.0V @ 0.15A						
	FP40-60		40.0V CT @ 0.06A	20.0V @ 0.12A						
	FP56-45		56.0V CT @ 0.045A	28.0V @ 0.09A						
	FP88-28		88.0V CT @ 0.028A	44.0V @ 0.056A						
	FP120-20		120.0V CT @ 0.02A	60.0V @ 0.04A						
	FP230-10		230.0V CT @ 0.01A	115.0V @ 0.02A						
B	FP10-600	6.0	10.0V CT @ 0.6A	5.0V @ 1.2A	0.875	1.562	1.875	1.600	0.375	7
	FP12-475		12.6V CT @ 0.475A	6.3V @ 0.95A						
	FP16-375		16.0 CT @ 0.375A	8.0V @ 0.75A						
	FP20-300		20.0 CT @ 0.3A	10.0V @ 0.8A						
	FP24-250		24.0 CT @ 0.25A	12.0V @ 0.5A						
	FP30-200		30.0V CT @ 0.2A	15.0V @ 0.4A						
	FP34-170		34.0V CT @ 0.17A	17.0V @ 0.34A						
	FP40-150		40.0V CT @ 0.15A	20.0V @ 0.3A						
	FP56-100		56.0V CT @ 0.1A	28.0V @ 0.2A						
	FP88-65		88.0V CT @ 0.065A	44.0V @ 0.13A						
	FP120-50		120.0V CT @ 0.05A	60.0V @ 0.1A						
	FP230-25		230.0V CT @ 0.025A	115.0V @ 0.05A						
C	FP10-1200	12.0	10.0V CT @ 1.2A	5.0V @ 2.4A	1.062	2.000	2.500	2.000	0.500	11
	FP12-950		12.6V CT @ 0.95A	6.3V @ 1.9A						
	FP16-750		16.0 CT @ 0.75A	8.0V @ 1.5A						
	FP20-600		20.0 CT @ 0.6A	10.0V @ 1.2A						
	FP24-500		24.0 CT @ 0.5A	12.0V @ 1.0A						
	FP30-400		30.0V CT @ 0.4A	15.0V @ 0.8A						
	FP34-340		34.0V CT @ 0.34A	17.0V @ 0.68A						
	FP40-300		40.0V CT @ 0.3A	20.0V @ 0.6A						
	FP56-200		56.0V CT @ 0.2A	28.0V @ 0.4A						
	FP88-130		88.0V CT @ 0.13A	44.0V @ 0.26A						
	FP120-100		120.0V CT @ 0.1A	60.0V @ 0.2A						
	FP230-50		230.0V CT @ 0.05A	115.0V @ 0.1A						
D	FP10-2400	24	10.0V CT @ 2.4A	5.0V @ 4.8A	1.375	2.25	2.87	1.9	0.600	15
	FP12-1900		12.6V CT @ 1.9A	6.3V @ 3.8A						
	FP16-1500		16.0V CT @ 1.5A	8.0V @ 3.0A						
	FP20-1200		20.0V CT @ 1.2A	10.0V @ 2.4A						
	FP24-1000		24.0V CT @ 1.0A	12.0V @ 2.0A						
	FP30-800		30V CT @ 0.80mA	15.0V @ 1.6A						
	FP34-700		34V CT @ 0.70mA	17.0V @ 1.4A						
FP40-600	56V CT @ 0.60mA	20.0V @ 1.2A								
FP56-425	56V CT @ 0.425mA	28.0V @ 0.85A								
E	FP10-4800	48	10V CT @ 4.8A	5.0V @ 9.6A	1.375	2.5	3.12	2.18	0.600	21
	FP12-3800		12.6V CT @ 3.8A	6.3V @ 7.6A						
	FP16-3000		16V CT @ 3.0A	8.0V @ 6.0A						
	FP20-2400		20.0V CT @ 2.4A	10.0V @ 4.8A						
	FP24-2000		24.0V CT @ 2.0A	12.0V @ 4.0A						
	FP30-1600		30.0V CT @ 1.6A	15.0V @ 3.2A						
	FP34-1400		34.0V CT @ 1.4A	17.0V @ 2.8A						
	FP40-1200		40.0V CT @ 1.2A	20.0V @ 2.4A						
FP56-850	56.0V CT @ 0.85A	28.0V @ 1.7A								

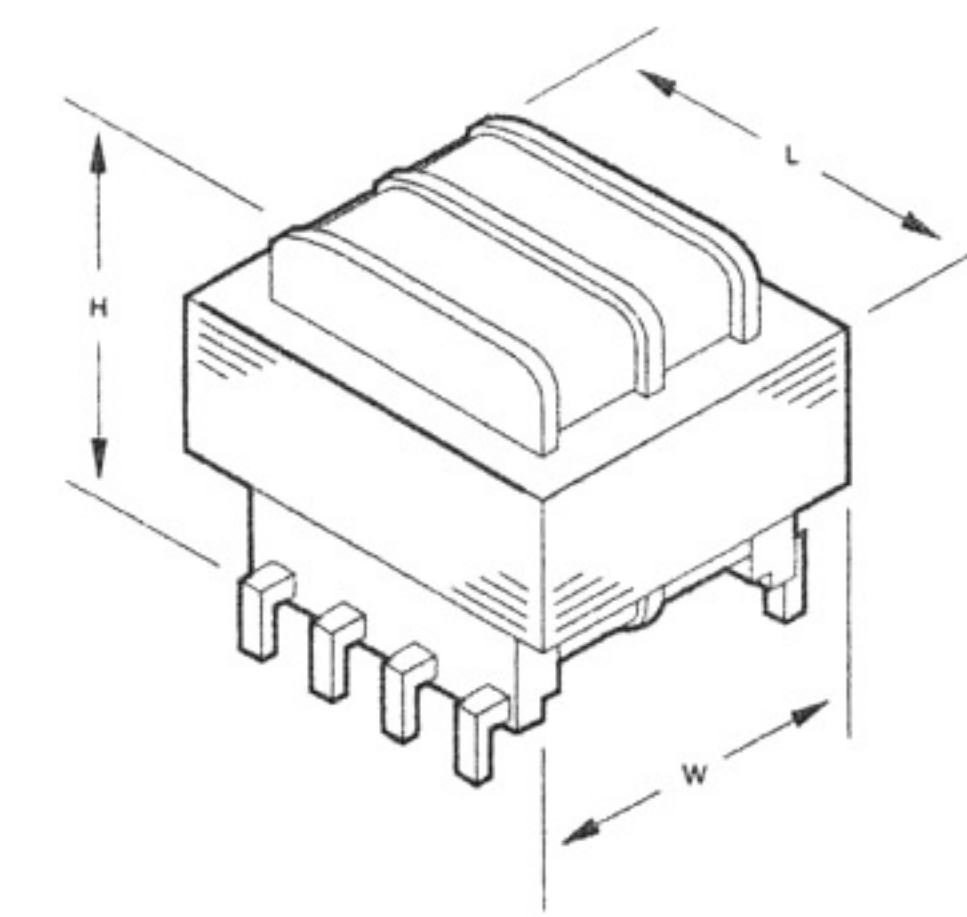
CT = Center Tap

**Technical Notes**

1. Hi-pot tested at 2,000 VRMS.
2. Split bobbin with side-by-side windings to reduce capacitance and eliminate the need for a static shield.



# Power Transformers



The Triad Split Pack split bobbin transformer is an extremely versatile tool for PC board applications. Split Pack transformers are nonconcentrically wound -- with primaries and secondaries side-by-side. Unlike the secondary-on-top-of-primary designs of standard PC board transformers, the split bobbin winding and low capacitive coupling eliminate costly electrostatic shielding. It is offered in a dual secondary configuration with either single or dual primaries.

**Primary:** 115 V, 50/60 Hz **VA Ranges:** 1.1 to 36.0  
**Secondary:** Series - 10 to 120 V; Parallel - 5 to 60 V

Section	Single Primary 6 Pin	Dual Primary 8 Pin	VA	Secondary		Dimensions						Wt. Lbs.	
				Series	Parallel	H	W	L	ML	A	B		C
A	F10-110	FS10-110	1.1	10.0V CT @ 0.11A	5.0V @ 0.22A	1 1/4	1 1/4	1 1/4	•	0.250	0.250	1.20	0.17
	F12-090	FS12-090		12.6V CT @ 0.09A	6.3V @ 0.18A								
	F16-070	FS16-070		16.0V CT @ 0.07A	8.0V @ 0.14A								
	F20-055	FS20-055		20.0V CT @ 0.055A	10.0V @ 0.11A								
	F24-045	FS24-045		24.0V CT @ 0.045A	12.0V @ 0.09A								
	F28-040	FS28-040		28.0V CT @ 0.040A	14.0V @ 0.08A								
	F36-030	FS36-030		36.0V CT @ 0.03A	18.0V @ 0.06A								
	F48-023	FS48-023		48.0V CT @ 0.023A	24.0V @ 0.046A								
	F56-020	FS56-020		56.0V CT @ 0.02A	28.0V @ 0.04A								
	F120-010	FS120-01		120.0V CT @ 0.01A	60.0V @ 0.02A								
B	F10-250	FS10-250	2.5	10.0V CT @ 0.25A	5.0V @ 0.5A	1 1/4	1 1/4	1 1/4	•	0.250	0.250	1.20	0.25
	F12-200	FS12-200		12.6V CT @ 0.2A	6.3V @ 0.4A								
	F16-150	FS16-150		16.0V CT @ 0.15A	8.0V @ 0.3A								
	F20-120	FS20-120		20.0V CT @ 0.12A	10.0V @ 0.24A								
	F24-100	FS24-100		24.0V CT @ 0.1A	12.0V @ 0.2A								
	F28-85	FS28-85		28.0V CT @ 0.085A	14.0V @ 0.17A								
	F36-65	FS36-65		36.0V CT @ 0.065A	18.0V @ 0.13A								
	F48-050	FS48-050		48.0V CT @ 0.05A	24.0V @ 0.1A								
	F56-045	FS56-045		56.0V CT @ 0.045A	28.0V @ 0.09A								
	F120-020	FS120-02		120.0V CT @ 0.02A	60.0V @ 0.04A								
C	F10-600	FS10-600	6.0	10.0V CT @ 0.6A	5.0V @ 1.2A	1 1/4	1 1/4	1 1/4	1 1/4	0.250	0.350	1.280	0.44
	F12-500	FS12-500		12.6V CT @ 0.5A	6.3V @ 1.0A								
	F16-400	FS16-400		16.0V CT @ 0.4A	8.0V @ 0.8A								
	F20-300	FS20-300		20.0V CT @ 0.3A	10.0V @ 0.6A								
	F24-250	FS24-250		24.0V CT @ 0.25A	12.0V @ 0.5A								
	F28-200	FS28-200		28.0V CT @ 0.2A	14.0V @ 0.4A								
	F36-170	FS36-170		36.0V CT @ 0.17A	18.0V @ 0.34A								
	F48-125	FS48-125		48.0V CT @ 0.125A	24.0V @ 0.25A								
	F56-110	FS56-110		56.0V CT @ 0.11A	28.0V @ 0.22A								
	F120-050	FS120-05		120.0V CT @ 0.05A	60.0V @ 0.1A								
D	F10-1200	FS10-1200	12.0	10.0V CT @ 1.2A	5.0V @ 2.4A	1 1/4	1 1/4	1 1/4	1 1/4	0.30	0.40	1.410	0.70
	F12-1000	FS12-1000		12.6V CT @ 1.0A	6.3V @ 2.0A								
	F16-800	FS16-800		16.0V CT @ 0.8A	8.0V @ 1.6A								
	F20-600	FS20-600		20.0V CT @ 0.6A	10.0V @ 1.2A								
	F24-500	FS24-500		24.0V CT @ 0.5A	12.0V @ 1.0A								
	F28-420	FS28-420		28.0V CT @ 0.42A	14.0V @ 0.84A								
	F36-350	FS36-350		36.0V CT @ 0.35A	18.0V @ 0.7A								
	F48-250	FS48-250		48.0V CT @ 0.25A	24.0V @ 0.5A								
	F56-220	FS56-220		56.0V CT @ 0.22A	28.0V @ 0.44A								
	F120-100	FS120-100		120.0V CT @ 0.1A	60.0V @ 0.2A								
E	F10-2000	FS10-2000	20.0	10.0V CT @ 2.0A	5.0V @ 4.0A	1 1/4	1 1/4	2 1/4	1 1/2	0.30	0.40	1.60	0.80
	F12-1600	FS12-1600		12.6V CT @ 1.6A	6.3V @ 3.2A								
	F16-1250	FS16-1250		16.0V CT @ 1.25A	8.0V @ 2.5A								
	F20-1000	FS20-1000		20.0V CT @ 1.0A	10.0V @ 2.0A								
	F24-800	FS24-800		24.0V CT @ 0.8A	12.0V @ 1.6A								
	F28-700	FS28-700		28.0V CT @ 0.7A	14.0V @ 1.4A								
	F36-550	FS36-550		36.0V CT @ 0.55A	18.0V @ 1.1A								
	F48-400	FS48-400		48.0V CT @ 0.4A	24.0V @ 0.8A								
	F56-350	FS56-350		56.0V CT @ 0.35A	28.0V @ 0.7A								
	F120-160	FS120-160		120.0V CT @ 0.16A	60.0V @ 0.32A								

CT = Center Tap



# Power Transformers

Section	Single Primary 6 Pin	Dual Primary 8 Pin	VA	Secondary		Dimensions							Wt. Lbs.
				Series	Parallel	H	W	L	ML	A	B	C	
A	F10-3600	FS10-3600	36.0	10.0V CT @ 3.6A	5.0V @ 7.2A	1 7/16	2 1/16	2 1/8	*	0.40	0.40	1.850	1.1
	F12-2850	FS12-2850		12.6V CT @ 2.85A	6.3V @ 5.7A								
	F16-2250	FS16-2250		16.0V CT @ 2.25A	8.0V @ 4.5A								
	F20-1800	FS20-1800		20.0V CT @ 1.8A	10.0V @ 3.6A								
	F24-1500	FS24-1500		24.0V CT @ 1.5A	12.0V @ 3.0A								
	F28-1300	FS28-1300		28.0V CT @ 1.3A	14.0V @ 2.6A								
	F36-1000	FS36-1000		36.0V CT @ 1.0A	18.0V @ 2.0A								
	F48-750	FS48-750		48.0V CT @ 0.75A	24.0V @ 1.5A								
	F56-650	FS56-650		56.0V CT @ 0.65A	28.0V @ 1.3A								
	F120-300	FS120-300		120.0V CT @ 0.3A	60.0V @ 0.6A								

\* 36 VA size has 4 mtg. bores on 2 1/16 x 1 1/4 centers. CT = Center Tap

## Outline Dimensions

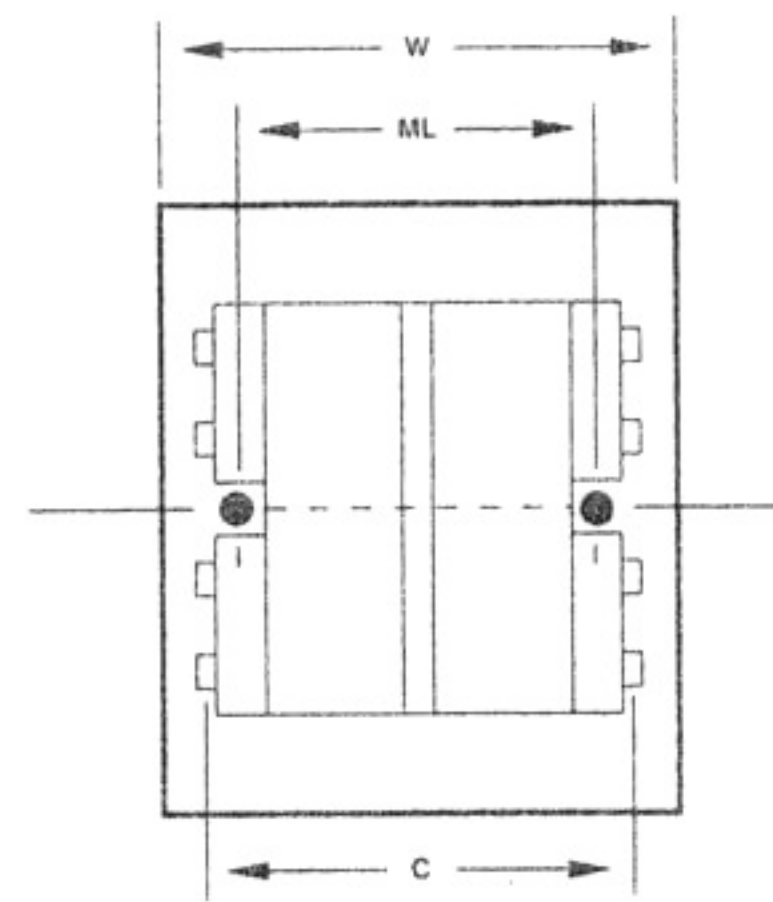
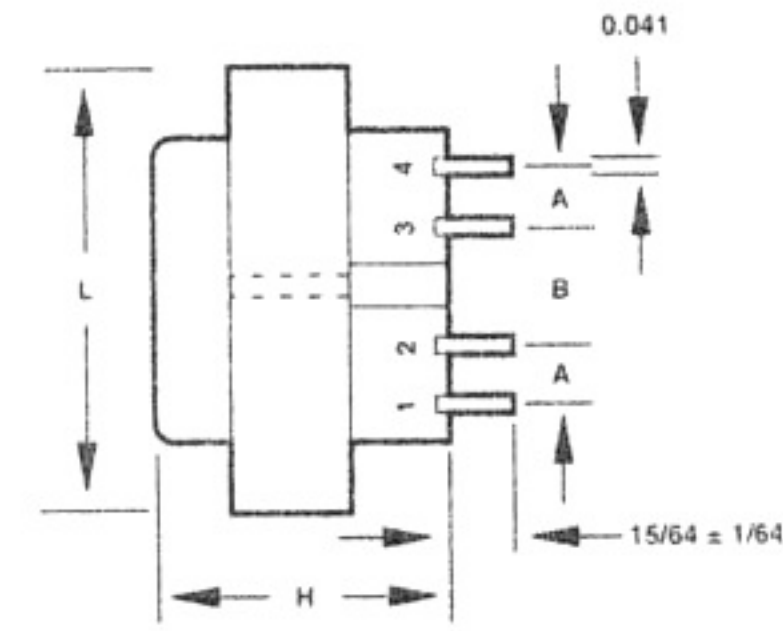
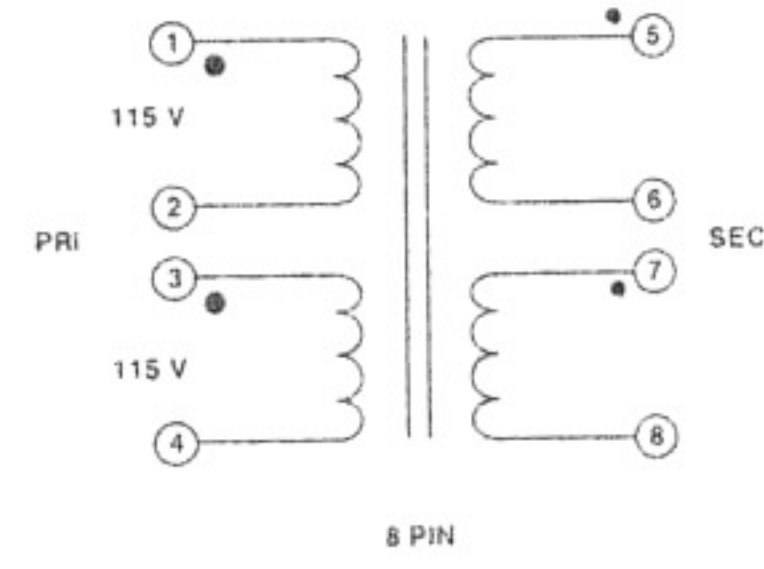
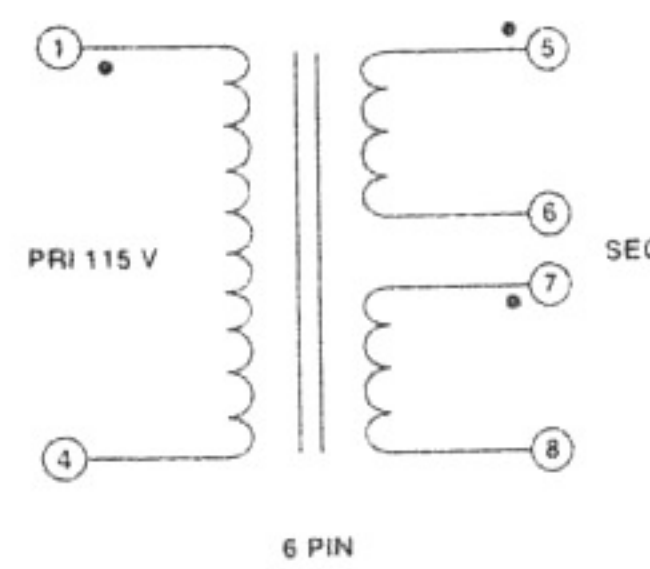
### Technical Notes

- Hi-pot tested at 2,500 VRMS.
- PC terminal pin spacing for accurate placement.
- 115 V connect primary in parallel.  
230 V connect primary in series.

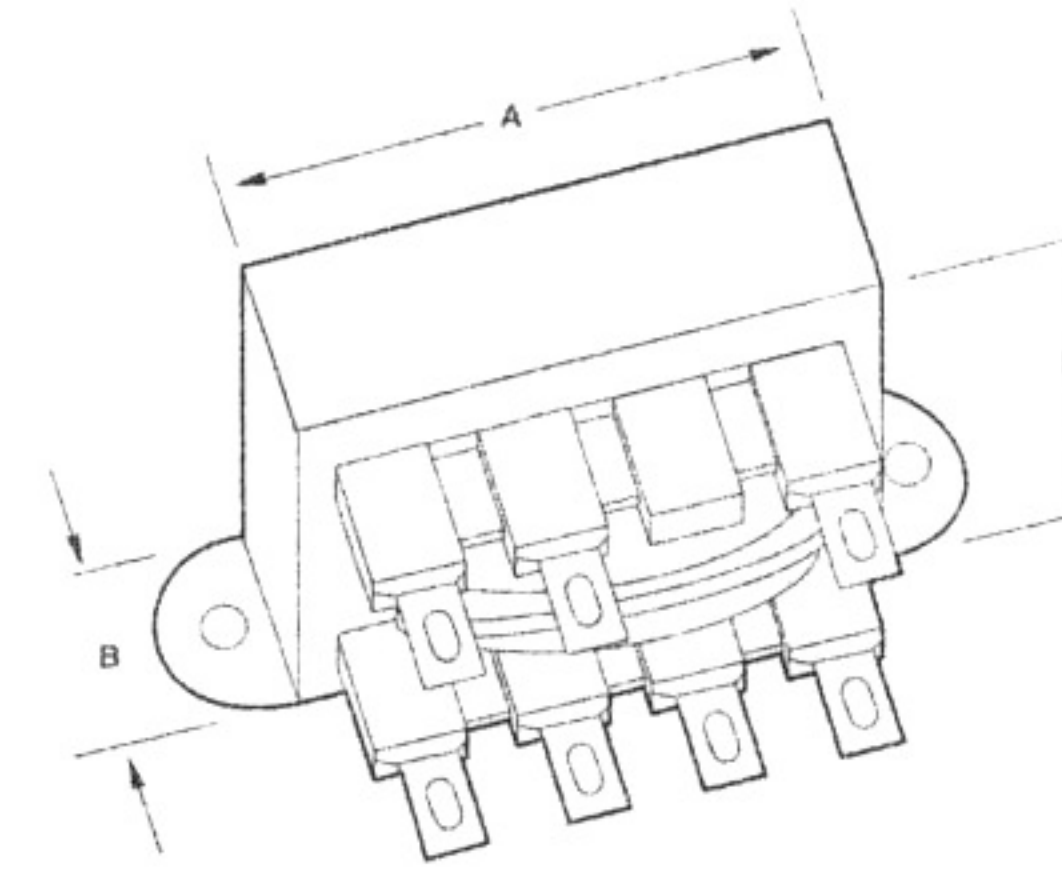
4. Series Connections: Primary - Input 1 & 4  
Connect 2 & 3  
Secondary - Input 5 & 8  
Connect 6 & 7

5. Parallel Connections: Primary - Input 1 & 2  
Connect 1 & 3, 2 & 4  
Secondary - Input 5 & 8  
Connect 5 & 7, 6 & 8

6. For single primary, omit pins 2 and 3.



# Power Transformers



The Triad Quick Pack small power transformer series offers a significant reduction in size and weight for a given VA rating. These transformers are available in six sizes for a wide variety of applications. They are bobbin wound for reduced size and small operating space. Split bobbin nonconcentric winding eliminates costly electrostatic shielding. Termination is suitable for quick connects or soldering.

Primary: 115 V, 115/230 V, 50/60 Hz  
VA Range: 2.4 to 100.0  
Output Rating Range: 10.0 V CT to 120.0 V CT

Section	Single Primary 115 V	Dual Primary 115/230 V	VA	Output Rating	Dimensions					Wt. Lbs.	
					L	W	H	A	B		ML
A	F3-10		2.4	10.0V CT @ 0.25A	2 1/16	1 1/16	1 1/16	1 1/8	1/16	1 1/8	0.25
	F3-12			12.6V CT @ 0.2A							
	F3-16			16.0V CT @ 0.15A							
	F3-20			20.0V CT @ 0.12A							
	F3-24			24.0V CT @ 0.1A							
	F3-28			28.0V CT @ 0.085A							
	F3-36			36.0V CT @ 0.065A							
	F3-48			48.0V CT @ 0.05A							
	F3-56			56.0V CT @ 0.045A							
	F3-120			120.0V CT @ 0.02A							
B	F4-10	FD4-10	6.0	10.0V CT @ 0.6A	2 1/8	1 1/8	1 1/8	1 1/16	1/16	2	0.44
	F4-12	FD4-12		12.6V CT @ 0.5A							
	F4-16	FD4-16		16.0V CT @ 0.4A							
	F4-20	FD4-20		20.0V CT @ 0.3A							
	F4-24	FD4-24		24.0V CT @ 0.25A							
	F4-28	FD4-28		28.0V CT @ 0.2A							
	F4-36	FD4-36		36.0V CT @ 0.17A							
	F4-48	FD4-48		48.0V CT @ 0.125A							
	F4-56	FD4-56		56.0V CT @ 0.11A							
	F4-120	FD4-120		120.0V CT @ 0.05A							
C	F5-10	FD5-10	12.0	10.0V CT @ 1.2A	2 1/16	1 1/8	1 1/8	1 1/16	1/16	2 1/8	0.70
	F5-12	FD5-12		12.6V CT @ 1.0A							
	F5-16	FD5-16		16.0V CT @ 0.8A							
	F5-20	FD5-20		20.0V CT @ 0.6A							
	F5-24	FD5-24		24.0V CT @ 0.5A							
	F5-28	FD5-28		28.0V CT @ 0.42A							
	F5-36	FD5-36		36.0V CT @ 0.35A							
	F5-48	FD5-48		48.0V CT @ 0.25A							
	F5-56	FD5-56		56.0V CT @ 0.22A							
	F5-120	FD5-120		120.0V CT @ 0.1A							
D	F6-10	FD6-10	30.0	10.0V CT @ 3.0A	3 1/8	1 1/16	1 1/16	2 1/16	1 1/16	2 1/16	1.10
	F6-12	FD6-12		12.6V CT @ 2.5A							
	F6-16	FD6-16		16.0V CT @ 2.0A							
	F6-20	FD6-20		20.0V CT @ 1.5A							
	F6-24	FD6-24		24.0V CT @ 1.25A							
	F6-28	FD6-28		28.0V CT @ 1.1A							
	F6-36	FD6-36		36.0V CT @ 0.85A							
	F6-48	FD6-48		48.0V CT @ 0.63A							
	F6-56	FD6-56		56.0V CT @ 0.54A							
	F6-120	FD6-120		120.0V CT @ 0.25A							
E	F7-10	FD7-10	56.0	10.0V CT @ 5.0A	3 1/16	1 1/16	2 1/8	2 1/16	1 1/16	3 1/8	1.70
	F7-12	FD7-12		12.6V CT @ 4.0A							
	F7-16	FD7-16		16.0V CT @ 3.5A							
	F7-20	FD7-20		20.0V CT @ 2.8A							
	F7-24	FD7-24		24.0V CT @ 2.4A							
	F7-28	FD7-28		28.0V CT @ 2.0A							
	F7-36	FD7-36		36.0V CT @ 1.5A							
	F7-48	FD7-48		48.0V CT @ 1.2A							
	F7-56	FD7-56		56.0V CT @ 1.0A							
	F7-120	FD7-120		120.0V CT @ 0.5A							

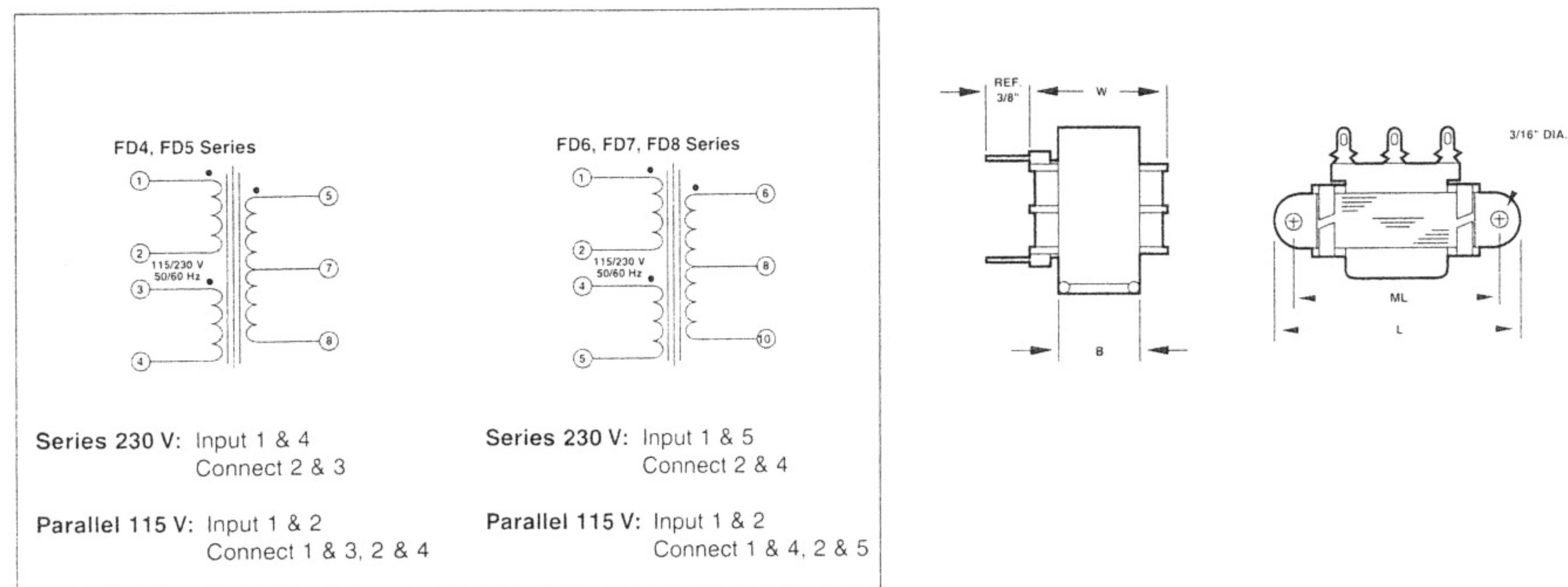
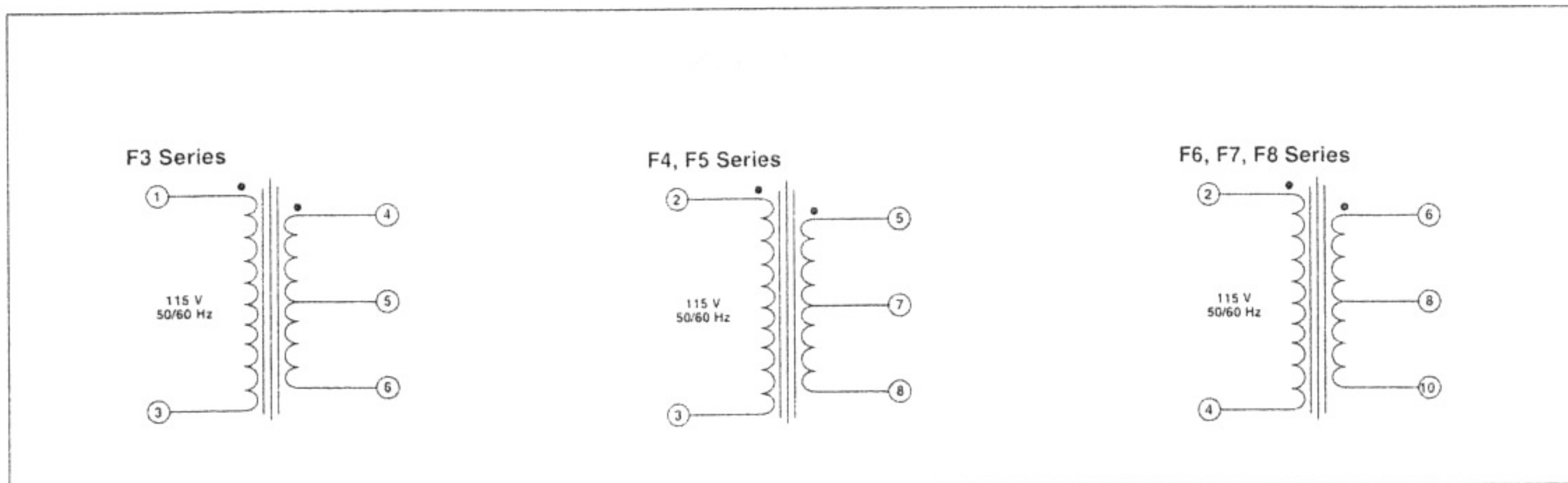
CT = Center Tap Mounting hole size: 3/16"

Section	Primary		VA	Output Rating	Dimensions						Wt. Lbs.
	Single Primary 115 V	Dual Primary 115/230 V			L	W	H	A	B	ML	
A	F8-10	FD8-10	100.0	10.0V CT @ 10.0A	4 1/2	2 1/4	2 7/16	3 3/16	1 1/8	3 3/16	2.75
	F8-12	FD8-12		12.6V CT @ 8.0A							
	F8-16	FD8-16		16.0V CT @ 6.25A							
	F8-20	FD8-20		20.0V CT @ 5.0A							
	F8-24	FD8-24		24.0V CT @ 4.0A							
	F8-28	FD8-28		28.0V CT @ 3.6A							
	F8-36	FD8-36		36.0V CT @ 2.8A							
	F8-48	FD8-48		48.0V CT @ 2.0A							
	F8-56	FD8-56		56.0V CT @ 1.8A							
F8-120	FD8-120	120.0V CT @ 0.85A									

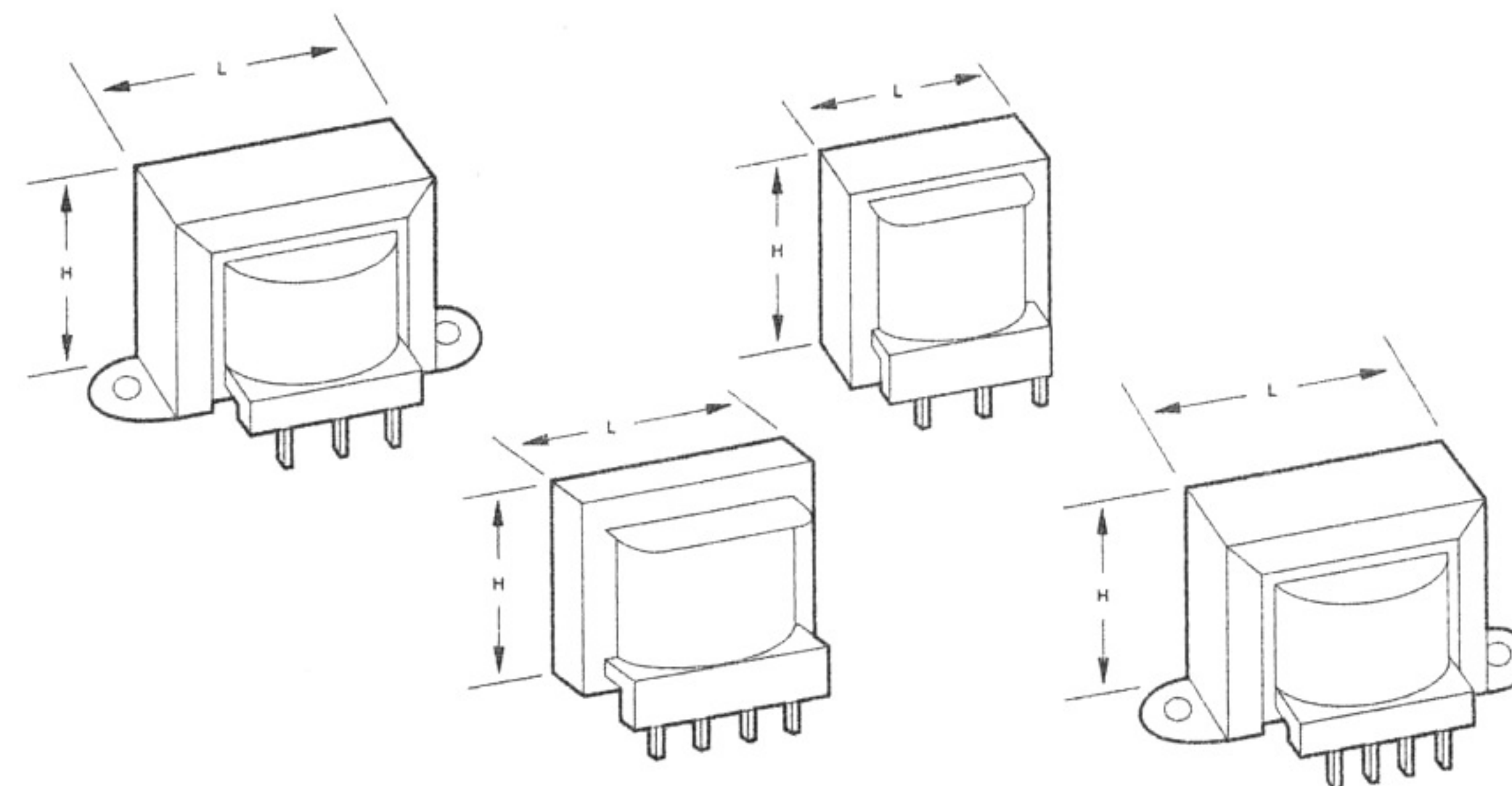
CT = Center Tap Mounting hole size: 1/16"

**Technical Notes**

1. Hi-pot tested at 2,500 VRMS.
2. Class B insulation for maximum temperature of 130°C.
3. Terminal size is .187" x .021".



# Power Transformers



Triad power transformers are offered in a wide selection of plug-in types to meet the needs of PC board and solid state power supply designs. These transformers can satisfy power as well as control and instrumentation applications. The transformers are available in single or dual primary and dual center tapped secondary configurations.

Primary: 115 V, 50/60 Hz

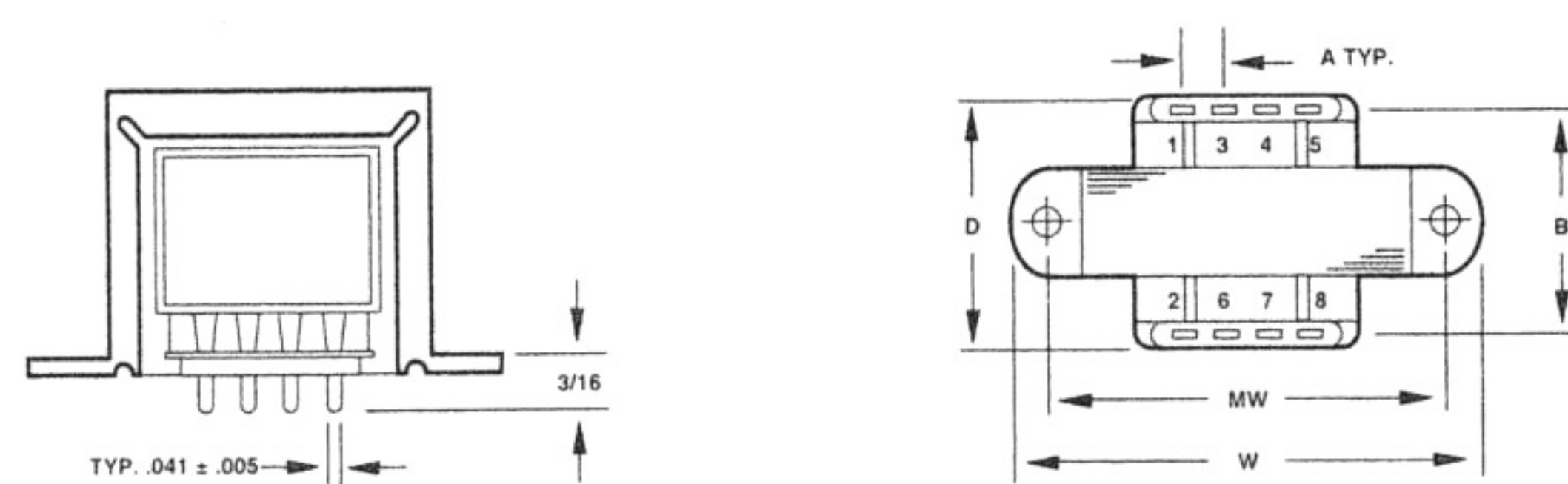
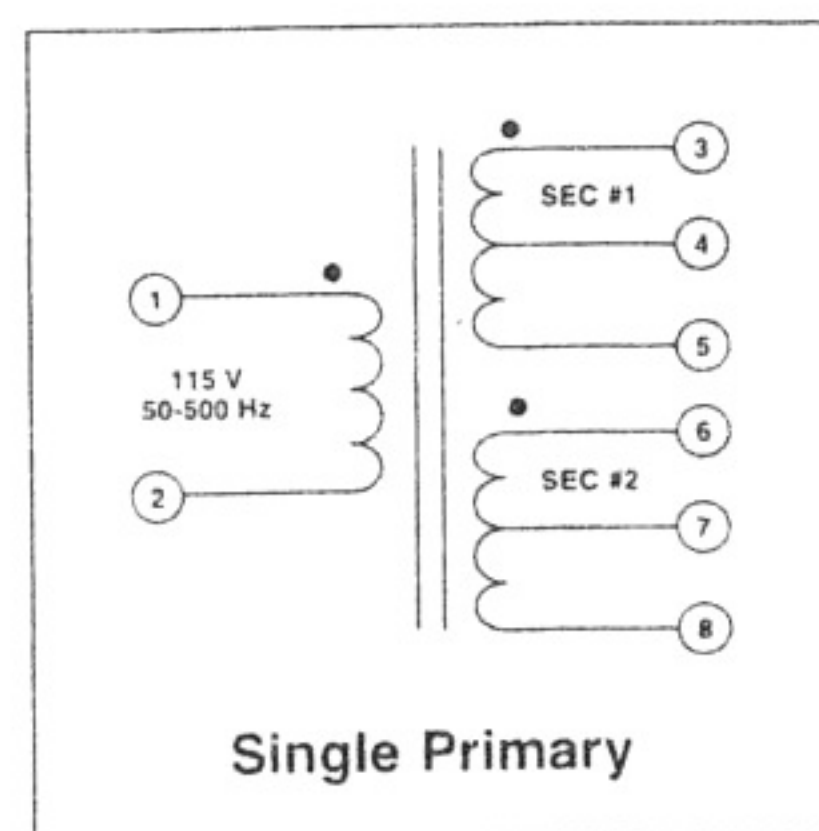
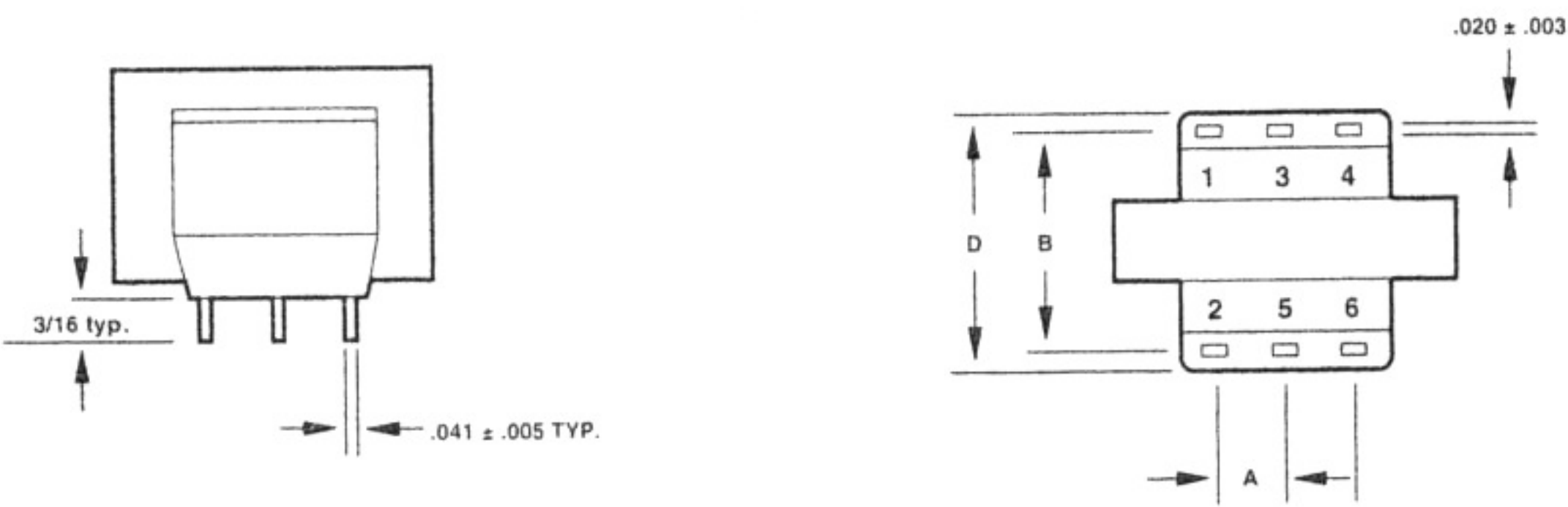
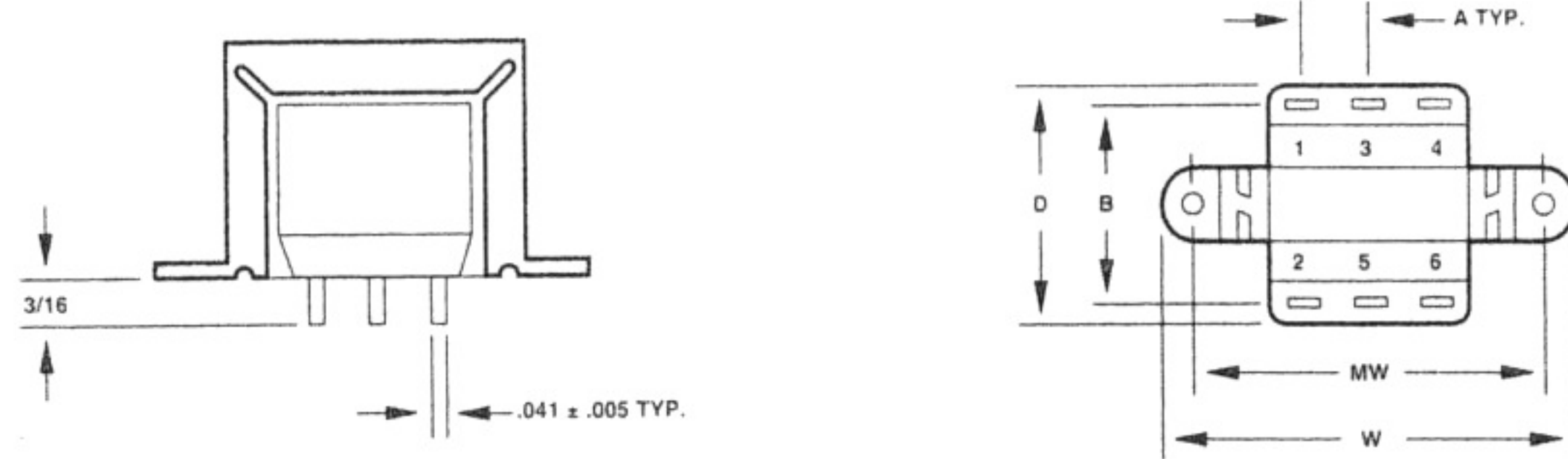
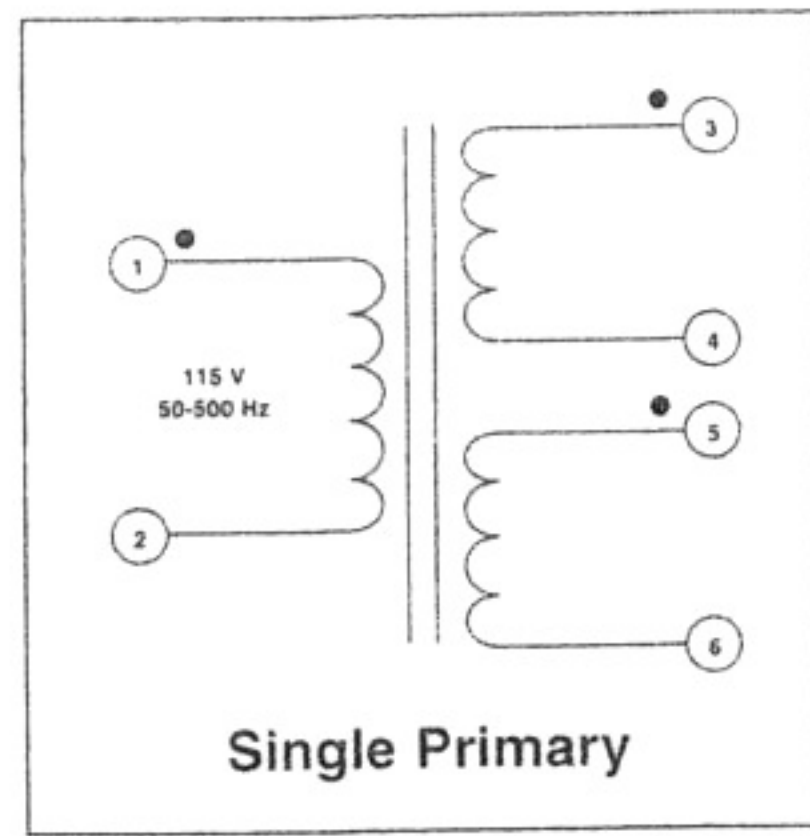
Section	Type No.	Figure	VA	Secondary		Dimensions						Wt. Oz.
				Series	Parallel	H	W	D	L	A	B	
A	F-131P	B	1 1/2	8.0V CT @ 0.188A	4.0V @ 0.376A	1 1/8	2 1/4	1 1/4	1 3/8	1/2	1	3.5
	F-139P			12.6V CT @ 0.12A	6.3V @ 0.24A							
	F-132P			15.0V CT @ 0.100A	7.5V @ 0.200A							
	F-150P			17.0V CT @ 0.085A	8.5V @ 0.170A							
	F-138P			25.2V CT @ 0.06A	12.6V @ 0.12A							
	F-133P			30.0V CT @ 0.050A	15.0V @ 0.100A							
	F-160P			34.0V CT @ 0.045A	17.0V @ 0.090A							
	F-137P			40.0V CT @ 0.038A	20.0V @ 0.076A							
	F-134P			54.0V CT @ 0.028A	27.0V @ 0.056A							
	F-135P			76.0V CT @ 0.020A	38.0V @ 0.040A							
	F-136P			116.0V CT @ 0.013A	58.0V @ 0.026A							
	B			F-141XP	A							
F-149XP		12.6V CT @ 0.35A	6.3V @ 0.70A									
F-142XP		15.0V CT @ 0.300A	7.5V @ 0.600A									
F-161XP		17.0V CT @ 0.264A	8.5V @ 0.528A									
F-148XP		25.2V CT @ 0.178A	12.6V @ 0.356A									
F-143XP		30.0V CT @ 0.150A	15.0V @ 0.300A									
F-162XP		34.0V CT @ 0.132A	17.0V @ 0.264A									
F-147XP		40.0V CT @ 0.112A	20.0V @ 0.224A									
F-144XP		54.0V CT @ 0.084A	27.0V @ 0.168A									
F-145XP		76.0V CT @ 0.060A	38.0V @ 0.120A									
F-146XP		116.0V CT @ 0.033A	58.0V @ 0.066A									
C		F-151XP	A	7 1/2		8.0V CT @ 0.940A	4.0V @ 1.88A	1 1/4	2 1/2	1 1/2	1 3/8	1/2
	F-159XP	12.6V CT @ 0.60A			6.3V @ 1.2A							
	F-152XP	15.0V CT @ 0.500A			7.5V @ 1.000A							
	F-163XP	17.0V CT @ 0.441A			8.5V @ 0.882A							
	F-158XP	25.2V CT @ 0.30A			12.6V @ 0.60A							
	F-153XP	30.0V CT @ 0.250A			15.0V @ 0.500A							
	F-164XP	34.0V CT @ 0.220A			17.0V @ 0.440A							
	F-157XP	40.0V CT @ 0.188A			20.0V @ 0.376A							
	F-154XP	54.0V CT @ 0.140A			27.0V @ 0.280A							
	F-155XP	76.0V CT @ 0.100A			38.0V @ 0.200A							
	F-156XP	116.0V CT @ 0.085A			58.0V @ 0.130A							

CT = Center Tap Mounting hole size: Figure A = 1/16"

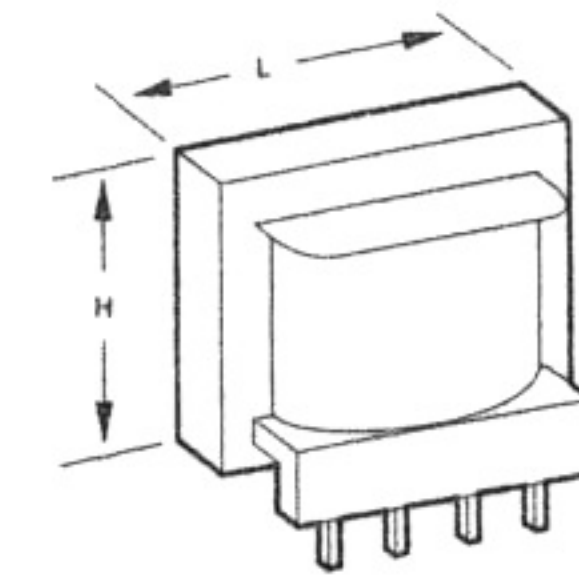
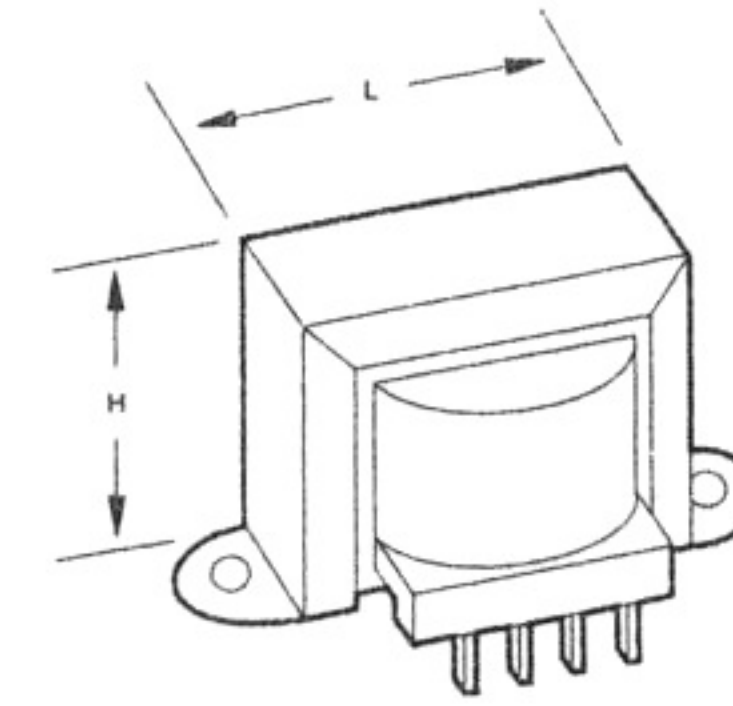
Section	Type No.	Figure	VA	Secondary		Dimensions						Wt. Oz.
				Secondary No. 1	Secondary No. 2	H	W	D	L	A	B	
D	F-165P	C	1 1/2	24.0V CT @ 0.025A	9.0V CT @ 0.100A	1 1/8	1 3/8	1 1/2	1 3/8	1/4	1	3.5
	F-167P			32.0V CT @ 0.020A	15.0V CT @ 0.060A							
E	F-168XP	D	4 1/2	32.0V CT @ 0.050A	15.0V CT @ 0.195A	1 7/16	2 3/8	1 1/4	1 3/8	1/4	1 1/2	7.5
F	F-166XP	D	7 1/2	24.0V CT @ 0.125A	9.0V CT @ 0.500A	1 1/4	2 1/2	1 1/2	1 3/8	1/4	1 1/8	10.5
	F-169XP			32.0V CT @ 0.100A	15.0V CT @ 0.287A							

CT = Center Tap Mounting hole size: Figure A = 1/16"

**Technical Notes**  
1. Hi-pot tested at 1,500 VRMS.



# Power Transformers



Triad power transformers are offered in a wide selection of plug-in types to meet the needs of PC board and solid state power supply designs. These transformers can satisfy power as well as control and instrumentation applications. The transformers are available in a single or dual primary and dual center tapped secondary configurations.

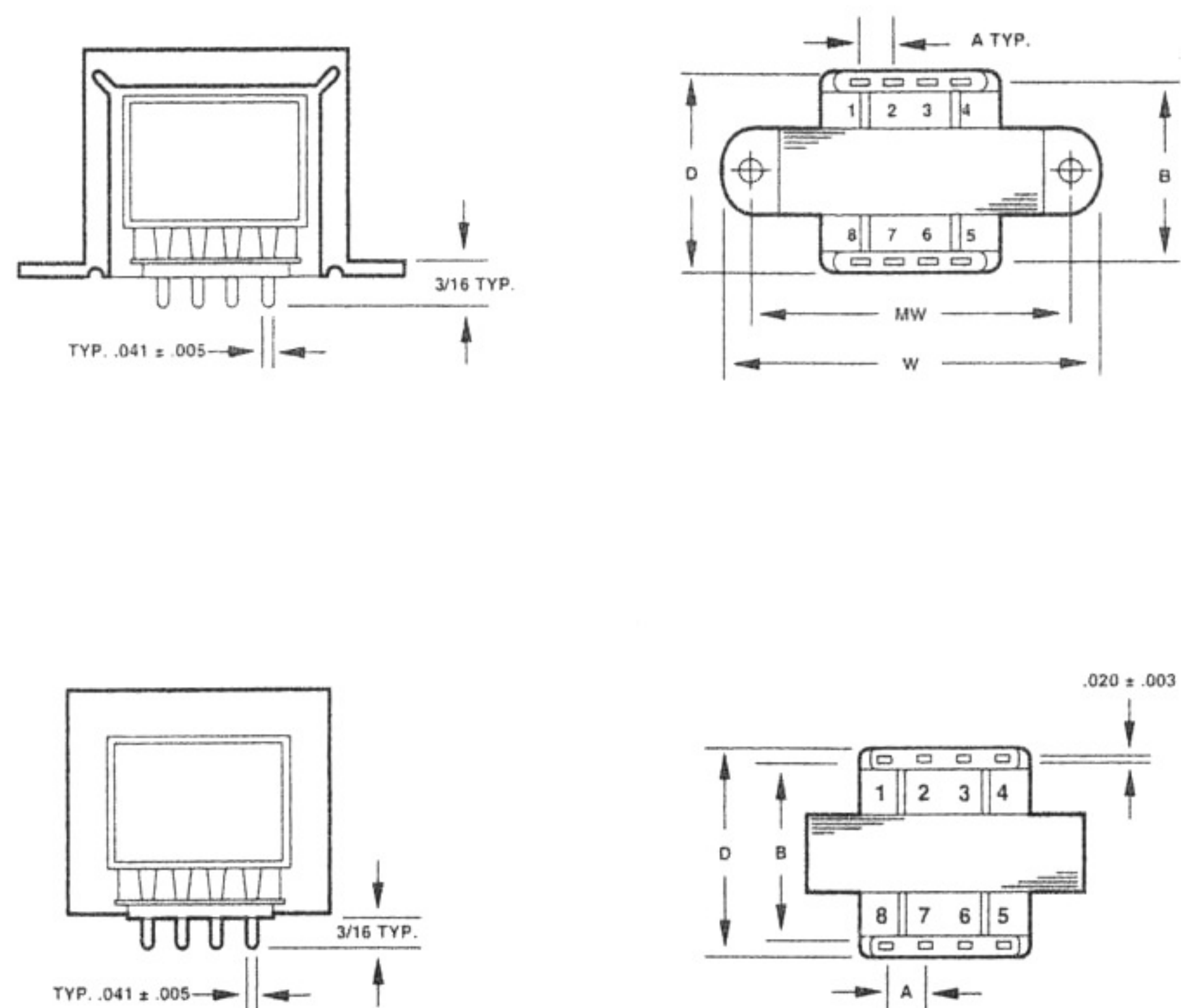
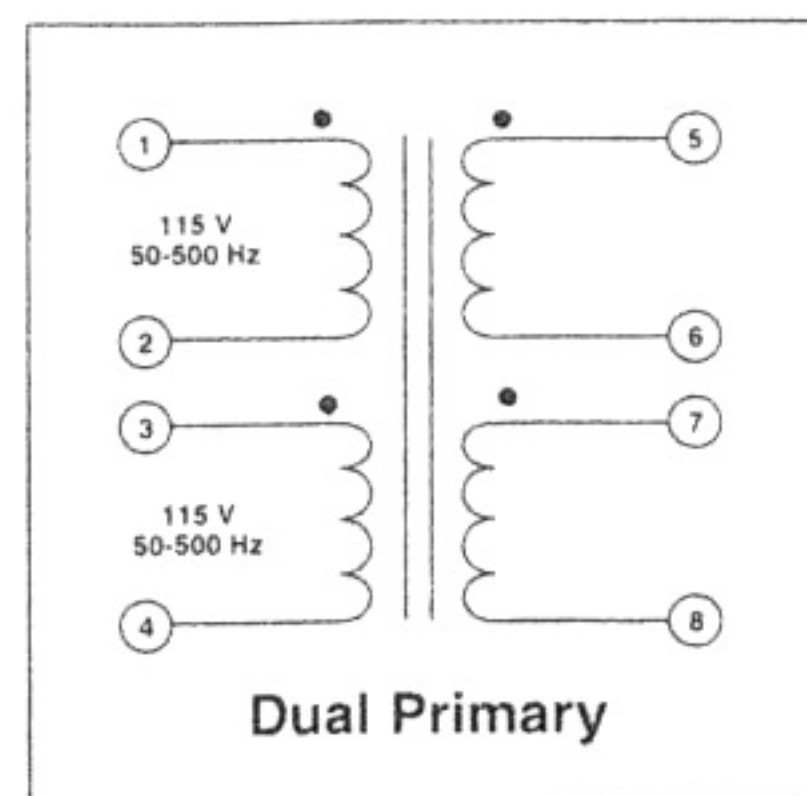
Primary: 115/230 V, 50/60 Hz

Section	Type No.	Figure	VA	Secondary		Dimensions						Wt. Oz.	
				Series	Parallel	H	W	D	L	A	B		MW
A	F-3132P	B	1 1/2	15.0V CT @ 0.1A	7.5V @ 0.2A	1 3/16	•	1 1/4	•	3/16	1	•	4.0
	F-333P			30.0V CT @ 0.050A	15.0V @ 0.100A								
	F-367P			230.0V CT @ 0.0065A	115.0V @ 0.013A								
B	F-348XP	A	4 1/2	12.6V CT @ 0.350A	6.3V @ 0.700A	1 3/8	2 3/8	1 1/4	1 3/8	3/4	1 3/8	2	6.5
C	F-3142XP	A	4 1/2	15.0V CT @ 0.3A	7.5V @ 0.6A	1 3/8	2 3/8	1 1/4	1 3/8	3/4	1 3/8	2	6.5
	F-349XP			16.0V CT @ 0.280A	8.0V @ 0.560A								
	F-350XP			24.0V CT @ 0.180A	12.0V @ 0.360A								
	F-358XP			20.0V CT @ 0.225A	10.0V @ 0.450A								
	F-3143XP			30.0V CT @ 0.15A	15.0V @ 0.3A								
	F-363XP			230.0V CT @ 0.020A	115.0V @ 0.040A								
D	F-3152XP	A	7 1/2	15.0V CT @ 0.5A	7.5V @ 1.0A	1 3/8	2 9/16	1 1/4	1 3/8	3/4	1 9/16	2 3/8	11.0
	F-3153XP			30.0V CT @ 0.25A	15.0V @ 0.5A								
E	F-359XP	A	10	24.0V CT @ 0.450A	12.0V @ 0.900A	1 3/8	2 9/16	1 1/4	1 3/8	3/4	1 9/16	2 3/8	11.0
	F-362XP			20.0V CT @ 0.500A	10.0V @ 1.0A								
	F-365XP			12.6V CT @ 0.800A	6.3V @ 1.6A								
	F-366XP			16.0V CT @ 0.640A	8.0V @ 1.28A								
	F-369XP			230.0V CT @ 0.044A	115.0V @ 0.088A								
F	F-370P	B	24	10.0V CT @ 2.4A	5.0V @ 4.8A	1 3/8	•	2 3/8	1 3/8	3/4	2 3/8	•	13.3
	F-371P			12.6V CT @ 2.0A	6.3V @ 4.0A								
	F-372P			16.0V CT @ 1.5A	8.0V @ 3.0A								
	F-373P			20.0V CT @ 1.2A	10.0V @ 2.4A								
	F-374P			24.0V CT @ 1.0A	12.0V @ 2.0A								
	F-375P			28.0V CT @ 0.8A	14.0V @ 1.6A								
	F-376P			34.0V CT @ 0.7A	17.0V @ 1.4A								
	F-377P			40.0V CT @ 0.6A	20.0V @ 1.2A								
	F-378P			56.0V CT @ 0.42A	28.0V @ 0.84A								
	F-379P			120.0V CT @ 0.2A	60.0V @ 0.4A								

CT = Center Tap Mounting hole size: Figure A = 3/16"

**Technical Notes**

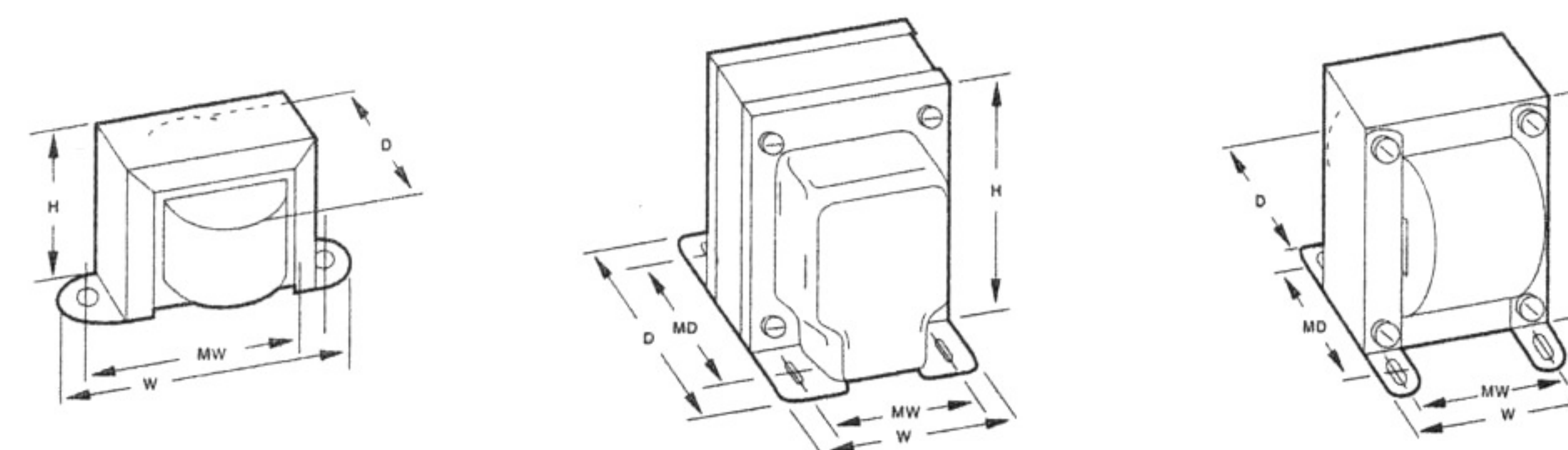
1. The transformers with dual primaries permit their use in equipment for sale in both foreign and domestic markets.
2. Hi-pot tested at 1,500 VRMS.



*Triad Magnetics can be your total transformer source. Our flexible production lines are just as capable of handling a component order from 500 to 500,000. Call your Triad distributor for details.*

# Power Transformers

Chassis Mount Style Power Transformers



**Description**

Triad offers a full choice of power supply transformers for direct use or in transformer, rectifier, or filter circuits. Other available secondary voltages include control, filament and low level signaling in standard values. The transformers are single primary with single and multiple secondaries in standard size and weight configurations.

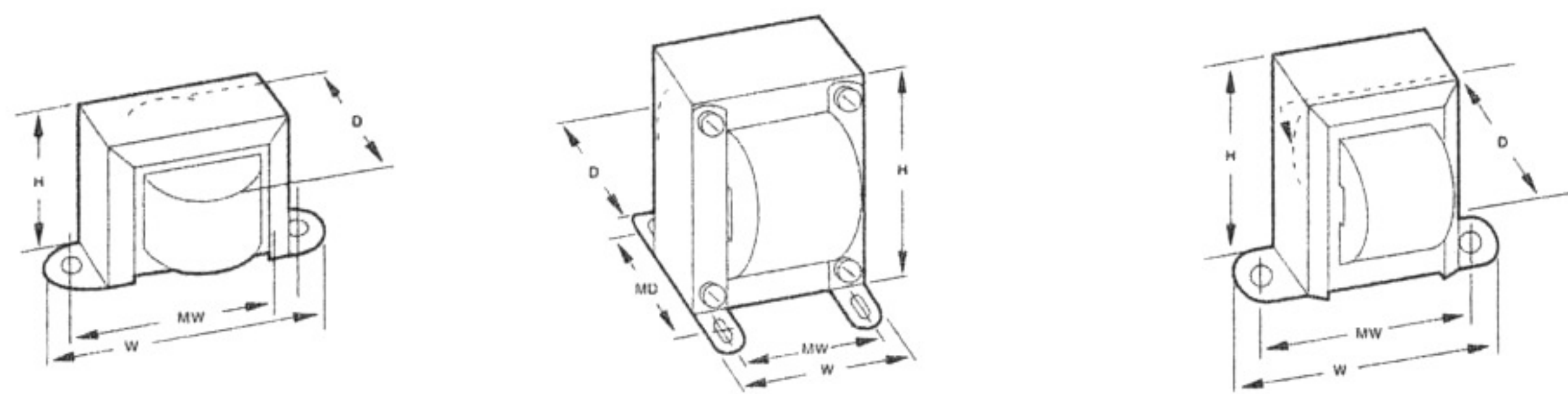
**Primary:**

115/230 V, 50/60 Hz

**Single Secondary**

	Type No.	Secondary Volts	Amps	Primary Voltage	RMS Test Voltage (Sec.)	Case Type	Connections	Dimensions			Mounting Dimensions		Wt. Lbs.
								H	W	D	MW	MD	
A	F-1X#	2.5 CT	3.0	115	1,500	X	Leads	1 1/8"	2 3/16"	1 3/8"	2 1/2"	•	0.68
	F-301X	2.5 CT	3.0	115/230	1,500	X	Leads	1 1/8"	2 3/16"	1 3/8"	2 1/2"	•	0.68
	F-6X#	2.5 CT	6.0	115	2,500	X	Leads	1 3/8"	3 3/16"	1 3/8"	2 3/16"	•	1.00
	F-3X#	2.5 CT	10.0	115	3,000	X	Leads	2 1/2"	3 3/4"	2 1/2"	3 3/4"	•	1.70
B	F-7X	5.0 CT	3.0	115	1,500	X	Leads	1 3/8"	3 3/16"	2"	2 3/16"	•	1.30
	F-8X	5.0 CT	6.0	115	1,500	X	Leads	2 1/2"	3 3/4"	2 1/4"	3 3/8"	•	1.70
	F-12X	5.0 CT	8.0	115	2,500	X	Leads	2 3/4"	4"	2 1/4"	3 3/8"	•	2.50
C	F-13X	6.3	0.6	115	1,500	X	Leads	1 3/8"	2 3/8"	1 3/8"	2"	•	0.37
	F-313X	6.3	0.6	115/230	1,500	X	Leads	1 3/8"	2 3/8"	1 3/8"	2"	•	0.37
	F-14X#	6.3 CT	1.2	115	2,500	X	Leads	1 3/8"	2 3/16"	1 3/8"	2 1/2"	•	0.70
	F-314X	6.3 CT	1.2	115/230	2,500	X	Leads	1 3/8"	2 3/16"	1 3/8"	2 1/2"	•	0.70
	F-16X	6.3 CT	3.0	115	2,500	X	Leads	1 3/8"	3 3/16"	2"	2 3/16"	•	1.30
	F-316X	6.3 CT	3.0	115/230	2,500	X	Leads	1 3/8"	3 3/16"	2"	2 3/16"	•	1.30
	F-43X#	6.3	4.0	115	1,500	X	Leads	1 3/8"	3 3/16"	2"	2 3/16"	•	1.25
	F-18X	6.3 CT	6.0	115	1,500	X	Leads	2 3/8"	4"	2 1/4"	3 3/8"	•	2.30
	F-318X	6.3 CT	6.0	115/230	1,500	X	Leads	2 3/8"	4"	2 1/4"	3 3/8"	•	2.30
	F-69X	6.3 CT	8.0	115	1,500	X	Leads	2 3/8"	4"	2 1/4"	3 3/8"	•	2.30
	F-21A	6.3 CT	10.0	115	1,500	A	1-Leads	3 3/8"	2 3/8"	3 3/8"	2 1/2"	2	3.80
F-22A	6.3 CT	20.0	115	2,000	A	2-Leads	3 3/4"	3 3/8"	4 1/4"	2 1/2"	3	7.00	
D	F-28U†	7.5 CT or 6.3 CT	25.0	115	3,000	U	Leads & Lugs	4 3/4"	3 3/16"	3 3/4"	3"	3 3/16"	7.50
E	F-180X	10.0 CT	1.0	115	1,500	X	Leads	1 3/8"	3 3/16"	1 3/8"	2 3/16"	•	0.90
	F-31X	10.0 CT	3.0	115	2,000	X	Leads	2 3/8"	3 3/4"	2 1/4"	3 3/8"	•	1.70

# 60 Hz †Tapped primary to produce lower voltages CT = Center Tap Mounting hole sizes: X = 3/16" U = 3/16" x 3/16" A = 3/8" x 3/16"



::

Table with columns: Section, Type No., Secondary Volts, Amps, Primary Voltage, RMS Test Voltage (Sec.), Case Type, Connections, Dimensions (H, W, D, MW, MD), Wt. Lbs.

# 60 Hz †Tapped primary to produce lower voltages CT = Center Tap Mounting hole sizes: U = 1/4" x 3/8" X = 3/16"

:: Single Secondary continue

Table with columns: Section, Type No., Secondary Volts, Amps, Primary Voltage, RMS Test Voltage (Sec.), Case Type, Connections, Dimensions (H, W, D, MW, MD), Wt. Lbs.

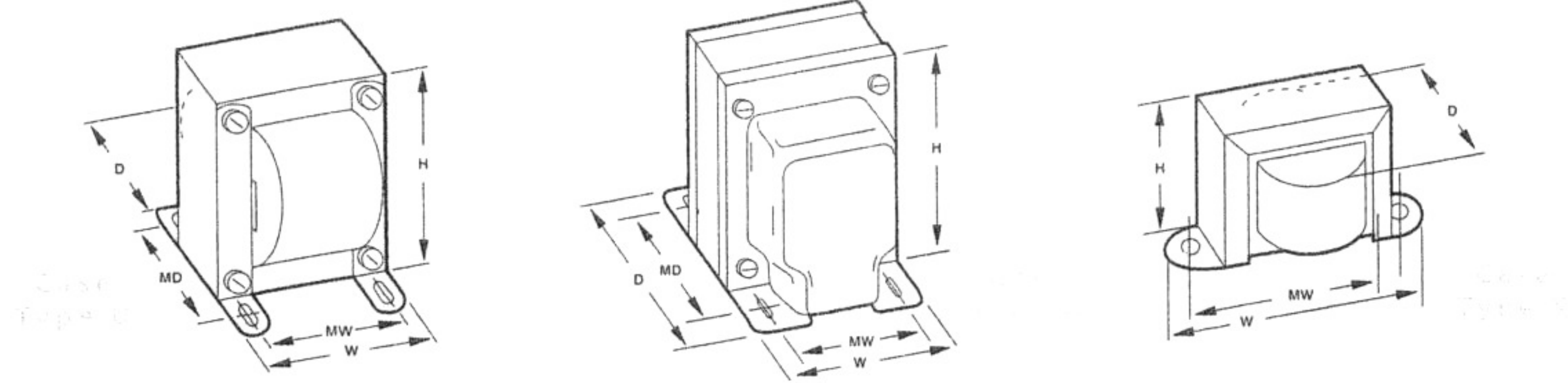
# 60 Hz CT = Center Tap Mounting hole sizes: X = 3/16" U = 1/4" x 3/8"

:: Multiple Secondary

Table with columns: Section, Type No., Secondary Volts, Amps, Primary Voltage, RMS Test Voltage (Sec.), Case Type, Connections, Dimensions (H, W, D, MW, MD), Wt. Lbs.

f Windings may be connected in series to obtain their combined voltage when properly phased. Current will be equal to the current of the lowest winding. Example: Two 6.3 V windings @ 2A in series would be 12.6 V @ 2A. Windings may also be connected in parallel to obtain combined current. Example: Two 6.3 V windings @ 2A in parallel would be 6.3 V @ 4A. # 60 Hz CT = Center Tap Mounting hole sizes X = 3/16" U = 1/4" x 3/8" Z = 3/16"

# Power Transformers



Triad chassis mount power transformers provide maximum performance when integrated into full wave center tap or bridge type circuits with silicon or selenium rectifiers. The secondary voltages are selected by primary taps. The secondaries of the Series F-90 transformers may be connected to provide a wide variety of output voltages (see Technical Notes). The Series F-90 transformers are designed for use with silicon diode rectifiers to supply the DC voltages for transistors in their various applications. They are intended for use with full wave center tap or

bridge rectifiers, but may be used with voltage doubler circuits at one-half of the rated current.

**Primary:** 115 V, 230 V, 50/60 Hz  
**Secondary AC:** F-90 Series - 14 to 40 (FWCT)  
 F-90 Series - 7 to 30 (FWB)

### Universal Series

Section	Type No.	Primary Voltage	Secondary AC		Case Type	Connections	Dimensions			Mounting Dimensions		Wt. lbs.
			Volts	Amps			H	W	D	MW	MD	
A	F-360U	115/230	0-6.5/13/19.5/26	3.0	U	Leads	3 1/4	2 1/16	2 1/4	2 1/4	2 1/16	3.50
B	F-361U	115/230	0-24/27/30/33/36	3.0	U	Leads	3 1/4	3 1/4	3 1/4	2 1/2	2 1/4	5.65

Mounting hole sizes: U = 1/16" x 3/16"

### Universal, 115 Volt

Section	Type No.	Primary Volts	Secondary AC		Case Type	Connections	Case Dimensions			Mounting Dimensions		Wt. Lbs.
			AC Volts	DC Amps			H	W	D	MW	MD	
C	F-94X	115†	10-20 CT-40 CT	0.035	X	Leads	1 1/2	2 1/2	1 1/2	2	•	0.50
D	F-90X	115†	10-20 CT-40 CT	0.1	X	Leads	1 1/2	2 1/16	1 1/2	2 1/2	•	0.70
E	F-91X	115†	10-20 CT-40 CT	0.3	X	Leads	2 1/2	3 1/16	2	3 1/2	•	1.50
F	F-93X	115†	10-20 CT-40 CT	0.75	X	Leads	2 1/2	4	2 1/2	3 3/8	•	2.40
G	F-92A	115†	10-20 CT-40 CT	1.0	A	Leads	3 1/16	2 1/2	3	2	2 1/16	3.25

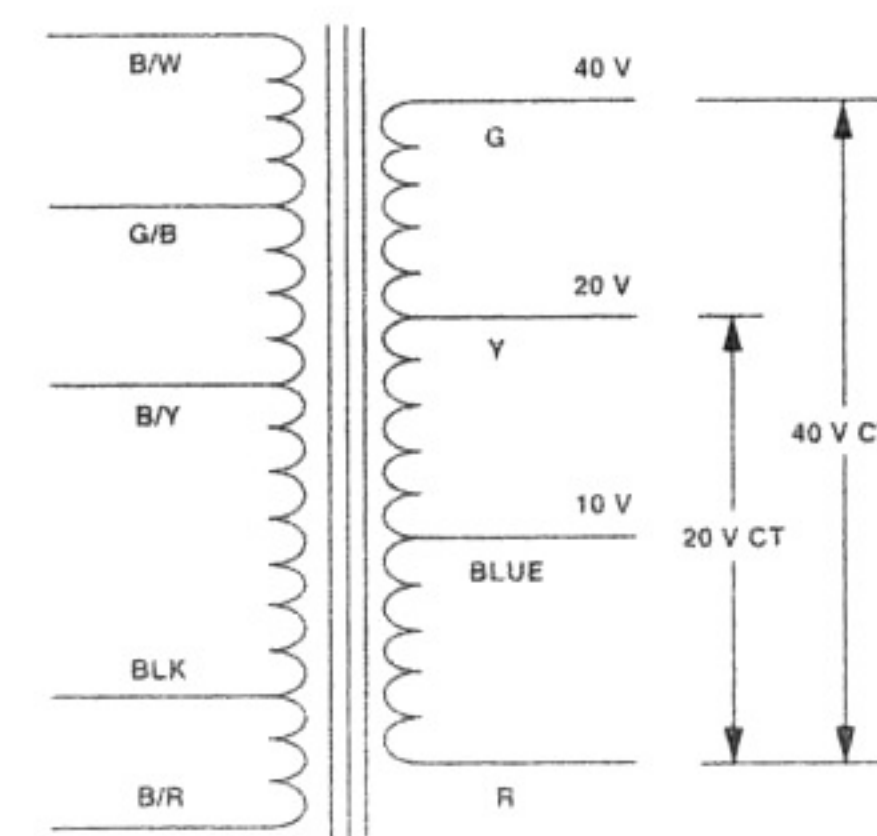
†Tapped primary to produce lower voltages CT = Center Tap Mounting hole sizes: X = 1/16" A = 1/8" x 1/16"

See Technical Notes below for voltages selected by various combinations of primary tap interconnections.

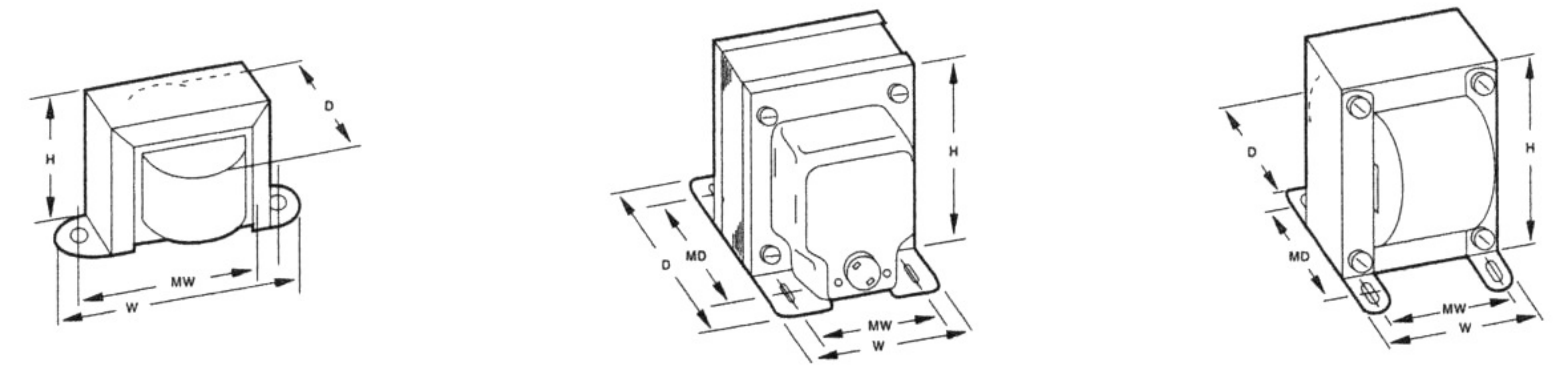
\*DC amp rating with a full wave bridge rectifier hi-pot tested at 1,500 VRMS

### Technical Notes

Primary 115 Volts			Secondary						
Lead	Lead	Leads	Green Red	Leads	Green Blue	Leads	Yellow Red	Leads	Blue Red
Black/Yellow	Black	40V CT Yellow		30.0V		20V CT Blue		10.0V	
Black/Yellow	Black/Red	38V CT Yellow		28.5V		19V CT Blue		9.5V	
Black/Green	Black	34V CT Yellow		25.5V		17V CT Blue		8.5V	
Black/Green	Black/Red	32V CT Yellow		24.0V		16V CT Blue		8.0V	
Black/White	Black	30V CT Yellow		22.5V		15V CT Blue		7.5V	
Black/White	Black/Red	28V CT Yellow		21.0V		14V CT Blue		7.0V	



# Power Transformers



Triad autotransformers are single winding transformers in which the primary coil is a fraction of the entire winding for voltage step-up or the secondary coil is a fraction of the entire winding for voltage step-down (see Technical Notes for an equivalent circuit diagram). In ordinary double wound power transformers, the primary and secondary are isolated and all the power is transferred by induction. In autotransformers, part of the power is transferred conductively through

the windings. Triad autotransformers come in a variety of configurations, case types and output watts (VA) ratings in excess of 2,000 watts. A universal isolation/autotransformer/voltage control model is available with up to a 4,000 output watts rating when operated as an autotransformer.

See Technical Notes

### Universal Series

Section	Type No.	VA	Primary Voltage	Secondary		Case Type	Connections	Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts ±5%	RMS Amps			H	W	D	MW	MD	
A	N-1X	50	230	115	0.435	X (1)	Leads	2 1/2	3 1/16	2	3 1/4	•	1.5
B	N-3M	85	230	115	0.74	M (3)	6' Cord, Plug & Socket	3 1/2	2 1/2	2 1/2	2 1/4	1 1/4	3.0
	N-3MGΔ	85	230	115	0.74	M (3)	6' Cord, Plug & Socket	3 1/2	2 1/2	3 1/2	2 1/4	2 1/4	3.0
C	N-2X	100	230	115	0.87	X (1)	Leads	2 1/2	4	2 1/16	3 3/4	•	2.1
D	N-150MG	150	115	230	0.65	M (3)	6' 3 Wire Cord, Plug & Socket	3 1/2	2 1/2	3 1/16	2 1/4	2 1/4	4.9
	F-302U#	150	277	115	1.30	U (2)	Leads	2 1/16	3 1/4	2 1/4	2 1/16	2	2.9
	N-4M	150	230	115	1.30	M (3)	6' Cord, Plug & Socket	3 1/2	2 1/2	3 1/2	2 1/4	2 1/4	4.7
	N-4MGΔ	150	230	115	1.30	M (3)	6' Cord, Plug & Socket	3 1/2	2 1/2	4 1/4	2 1/4	2 1/4	4.7

Δ Has 3-wire plug, cord and socket # 60 Hz

Mounting hole sizes: (1) = 1/16" (2) = 1/16" x 1/8" (3) = 1/8" x 1/16"

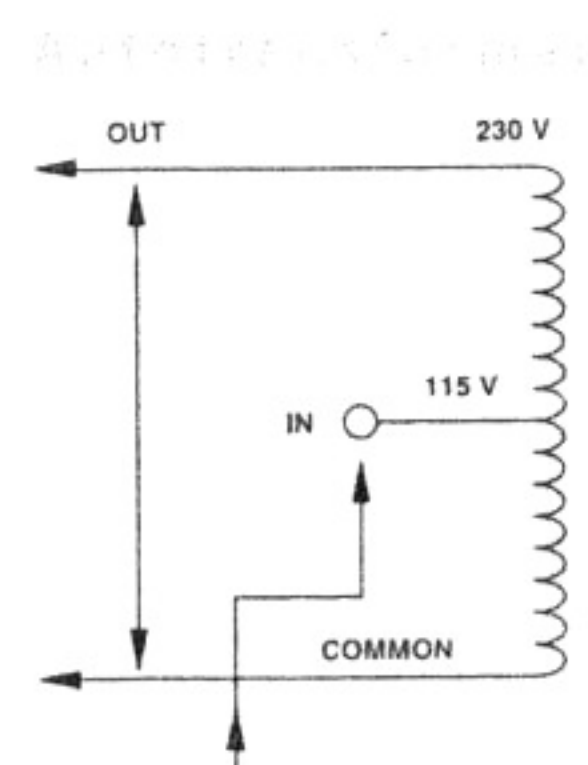
Section	Type No.	VA	Primary Volts	Secondary		Case Type	Connections	Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts ±5%	RMS Amps			H	W	D	MW	MD	
A	N-6U	200	230	115	1.70	U (2)	Leads	3 3/4	2 1/16	2 1/16	2 1/2	2 1/4	3.60
B	N-250MGΔ	250	115	230	1.10	M (3)	6' -3 Wire Cord, Plug & Socket	3 3/4	3 3/4	3 1/16	2 1/2	2 1/16	6.60
C	N-5M	250	230	115	2.17	M (3)	6' Cord, Plug & Socket	3 3/4	3 3/16	4 1/4	2 1/2	3	7.00
	N-5MGΔ	250	230	115	2.17	M (3)	6' Cord, Plug & Socket	3 3/4	3 3/16	4 1/16	2 1/2	3 1/2	7.00
D	N-500MGΔ	500	115	230	2.20	M (3)	6' -3 Wire Cord, Plug & Socket	4 1/4	3 3/4	4 1/4	3	3 3/4	11.20
E	N-7M	600	230	115	5.22	M (3)	6' Cord, Plug & Socket	4 1/4	3 1/16	5	3	3 3/4	12.00
	N-7MGΔ	600	230	115	5.22	M (3)	6' Cord, Plug & Socket	4 1/4	3 1/16	5	3	3 3/4	12.00
F	N-1000MGΔ	1,000	115	230	4.35	M (4)	6' -3 Wire Cord, Plug & Socket	5 1/4	4 1/2	5 1/2	3 1/2	4 1/4	17.39
G	N-9M	1,250	230	115	10.85	M (4)	6' Cord, Plug & Socket	5 1/16	4 1/2	6	3 1/2	4 1/2	21.00
	N-9MGΔ	1,250	230	115	10.85	M (4)	6' Cord, Plug & Socket	5 1/16	4 1/2	6	3 1/2	4 1/2	21.00
H	N-11M	2,000	230	115	17.40	M (4)	6' Cord, Plug & Socket	5 1/4	4 1/2	8 1/4	3 1/2	6 1/4	33.25
	N-11MGΔ	2,000	230	115	17.40	M (4)	6' Cord, Plug & Socket	5 1/4	4 1/2	8 1/4	3 1/2	6 1/4	33.25

Δ Has 3-wire plug, cord and socket

Mounting hole sizes: (2) = 1/4" x 3/8" (3) = 3/8" x 3/16" (4) = 1/2" x 3/16"

Technical Notes

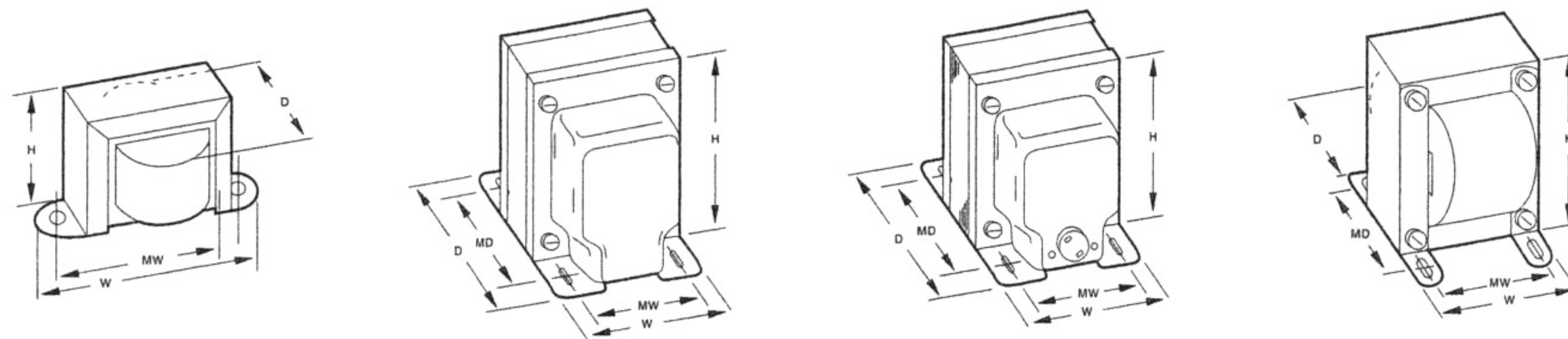
- Output wattage (VA) ratings 50 to 2,000 W.
- Wide selection of case types, including 6' line cords, plugs, sockets and lugs.
- All transformers are 50/60 Hz line frequency, except as noted.
- Hi-pot tested at 1,500 VRMS.



(Single winding input providing input/output)

# Power Transformers

## Isolation/Medical



Description

Triad isolation transformers are power transformers for isolating equipment from direct connection to the power line. They are offered in a variety of voltages and case types. Triad isolation transformers are also offered in hospital type (designed with an MD suffix) which are designed and constructed to meet the low leakage current requirements for today's medical equipment. The transformers are constructed with nonconcentrically wound coils. The primary and secondary are wound on separate arbors, then assembled on a laminate core side-by-side separated by insulation. This prevents

electrical connection, under normal or overload conditions, between the primary and secondary windings. These hospital type units are offered with a resettable circuit breaker, providing protection from overload and short circuit conditions.

Specifications

**Primary:** 115/230 VAC, 50/60 Hz  
**Secondary:** 115/230 VAC  
**Output Watts:** 15 to 1,000 VA

Standard Applications

Section	Type No.	VA	Primary Voltage	Secondary		Case Type	Connections	Lead Holes Used	Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts ±5%	Amps				H	W	D	MW	MD	
A	N-48X	15	115	115.0	0.13	X (1)	Leads	•	1 1/16	3 1/16	2	2 3/16	•	1.35
B	N-51X	35	115	115.0	0.3	X (1)	Leads	•	2 1/2	3 3/16	2 1/4	3 1/4	•	1.70
C	N-68X	50	115/230§	115.0	0.435	X (1)	Leads	•	2 1/2	3 3/16	2 1/4	3 1/4	•	1.70
D	N-53M	85	115	115.0	0.74	M (3)	6' Cord, Plug & Socket	•	3 3/16	2 1/2	3 1/4	2 1/4	2 1/4	4.70
	N-53MG√	85	115	115.0	0.74	M (3)	6' Cord, Plug & Socket	•	3 3/16	2 1/2	4 1/4	2 1/4	2 1/4	4.70
E	N-76U*	100	115	115.0	0.86	U (2)	Leads	•	3 3/16	2 1/16	3	2 1/4	2 1/2	4.00
	N-77U*	100	115/230	115.0	0.86	U (2)	Leads	•	3 3/16	2 1/16	3	2 1/4	2 1/2	4.00
F	N-54M	150	115	115.0	1.3	M (3)	6' Cord, Plug & Socket	•	3 3/4	3 3/16	4 1/4	2 1/2	3	7.00
	N-54MG√	150	115	115.0	1.3	M (3)	6' Cord, Plug & Socket	•	3 3/4	3 3/16	5 1/16	2 1/2	3 1/2	7.00
	N-73A	150	115	115/230§	0.65	A (3)	Leads	1	3 3/4	3 3/16	3 3/4	2 1/2	2 1/4	7.00
	N-67A	150	115/230§	115.0	1.3	A (3)	Leads	2	3 3/4	3 3/16	3 3/4	2 1/2	3	7.00
G	N-55M	250	115	115.0	2.17	M (3)	6' Cord, Plug & Socket	•	4 1/4	3 3/16	5	3	3 3/16	11.00
	N-55MG√	250	115	115.0	2.17	M (3)	6' Cord, Plug & Socket	•	4 1/4	3 3/16	5	3	3 3/16	11.00
	N-255MG√	250	230	115.0	2.17	M (3)	6' Cord, Plug & Socket	•	4 1/4	3 3/16	5	3	3 3/16	11.00
H	N-66A	250	115/230§	115.0	2.17	A (3)	Leads	2	4 1/4	3 3/16	4 3/4	3	3 3/4	11.00
	N-57M	500	115	115.0	4.35	M (5)	6' Cord, Plug & Socket	•	5 1/4	4 1/2	6 1/4	3 1/2	5 1/4	23.75

§ Split winding √With ground wire \*Unit does not include static shield  
 Mounting hole sizes: (1) = 3/16" (2) = 1/4" x 3/8" (3) = 3/8" x 3/16" (5) = 1/2" x 1/4"

:: Standard Applications

Section	Type No.	VA	Primary Voltage	Secondary		Case Type	Connections	Lead Holes Used	Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts ±5%	Amps				H	W	D	MW	MD	
A	N-57MG√	500	115	115.0	4.35	M (5)	6' Cord, Plug & Socket	•	5 <sup>1</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>4</sub>	23.75
	N-257MG√	500	230	115.0	4.35	M (5)	6' Cord, Plug & Socket	•	5 <sup>1</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>4</sub>	23.75
B	N-59M	1,000	115	115.0	8.70	M (5)	6' Cord, Plug & Socket	•	5 <sup>1</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	6	31.0
	N-59MG√	1,000	115	115.0	8.70	M (5)	6' Cord, Plug & Socket	•	5 <sup>1</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	6	31.0
	N-259MG√	1,000	230	115.0	8.70	M (5)	6' Cord, Plug & Socket	•	5 <sup>1</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	6	31.0

√With ground wire Mounting hole sizes: (5) = 1/2 x 3/4"

**Technical Notes**

1. Line cord, plug and receptacle are U.L. listed and verified to meet federal specifications.
2. Connections are by leads, plugs and sockets.
3. Hi-pot tested at 1,500 VRMS.
4. All units have static shields, except those marked with an asterisk.



:: Medical/Industrial Applications

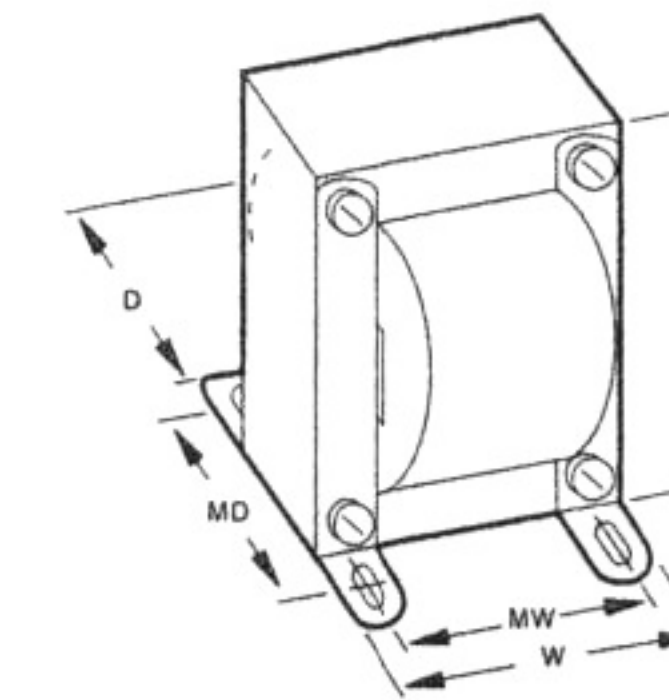
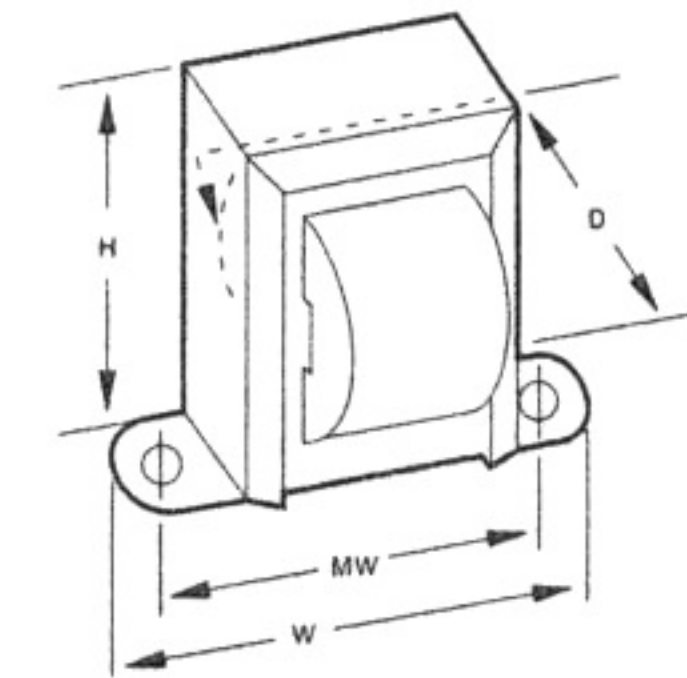
Section	Type No.	VA	Primary Voltage	Secondary		Case Type	Connections	Lead Holes Used	Dimensions			Mounting Dimensions		Wt. Lbs.
				Volts ±5%	RMS Amps				H	W	D	MW	MD	
C	N-90MD	250	115	115.0	2.17	M (3)	6' Cord, Plug & Socket Circuit Breaker	•	4 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>4</sub>	3	4 <sup>1</sup> / <sub>16</sub>	11.9
D	N-92MD	500	115	115.0	4.35	M (4)	6' Cord, Plug & Socket Circuit Breaker	•	5 <sup>1</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	7	3 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>4</sub>	17.6

Mounting hole sizes: (3) = 3/8 x 1/2" (4) = 1/2 x 3/4"

Leakage current from primary to secondary is rated at less than 50 micro-amps and is typically measured at less than 10 micro-amps.

When stock is a problem elsewhere, try us. We routinely have hundreds of thousands of completed standard units on hand. Call your nearest Triad distributor for a "stock status" on the industry's best -- Triad Transformers..

# Power Transformers



::

Triad control transformers supply secondary voltages that are commonly utilized in various electronic, electro-magnetic and electrical control conditions. These include such applications as use with relays, solenoids, small motors, speed changers, pumps, heating elements, control valves for fluids and gases, fans and blowers, electronic tubes, automatic assembly equipment, recording devices, elevators, door openers, and low voltage lamps.

::

**Primary:** 115/230 VAC, 50/60 Hz  
**VA Range:** 12 to 192  
**Secondary:** 6/12/24 VAC

:: Primary, 115/230 Volts - Secondary, 6/12/24 VAC

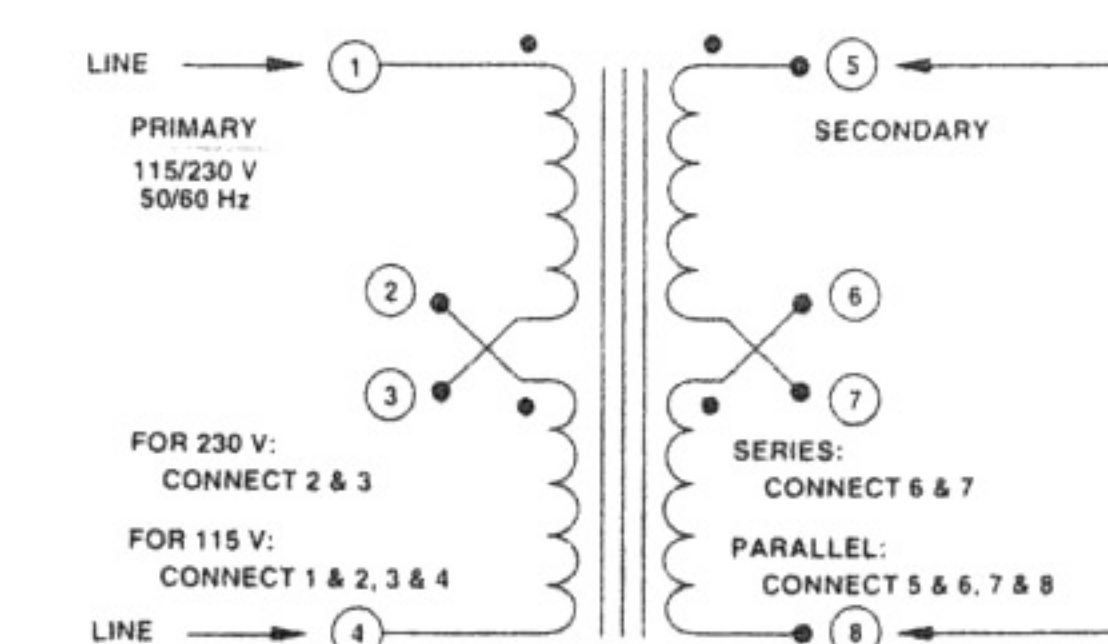
Section	Type No.	Secondaries		VA	Case Type	Connections	Dimensions			Mounting Dimensions		Wt. Lbs.
		Series	Parallel				H	W	D	MW	MD	
A	F-105Z	12.0V CT @ 1.0A	6.0V @ 2.0A	12	Z	Lugs	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	•	1.000
	F-211Z	48.0V CT @ 0.25A	24.0V @ 0.5A								•	0.678
B	F-106Z	12.0V CT @ 2.0A	6.0V @ 4.0A	24	Z	Lugs	2 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	2	2 <sup>1</sup> / <sub>16</sub>	•	1.500
	F-212Z	48.0V CT @ 0.50A	24.0V @ 1.0A								•	1.050
C	F-107Z	24.0V CT @ 2.0A	12.0V @ 4.0A	48	Z	Lugs	3 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	•	2.500
	F-213Z	48.0V CT @ 1.0A	24.0V @ 2.0A								•	2.250
D	F-398U	24.0V CT @ 3.0A	12.0V @ 6.0A	72	U	Lugs	3 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	•	4.250
	F-108U	24.0V CT @ 4.0A	12.0V @ 8.0A								•	4.250
E	F-214U	48.0V CT @ 2.0A	24.0V @ 4.0A	96	U	Lugs	3 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	•	3.240
	F-399U	24.0V CT @ 6.0A	12.0V @ 12.0A								•	5.900
F	F-400U	48.0V CT @ 3.0A	24.0V @ 6.0A	144	U	Lugs	4 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	•	8.000
	F-109U	24.0V CT @ 8.0A	12.0V @ 16.0A								•	6.060
G	F-215U	48.0V CT @ 4.0A	24.0V @ 8.0A	192	U	Lugs	4 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	•	3
	F-215U	48.0V CT @ 4.0A	24.0V @ 8.0A								•	3

CT = Center Tap Mounting hole sizes: Z = 3/16" U = 1/4 x 3/8"

::

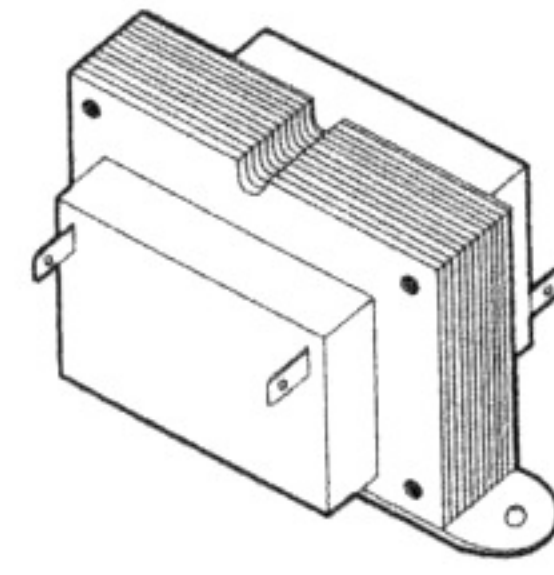
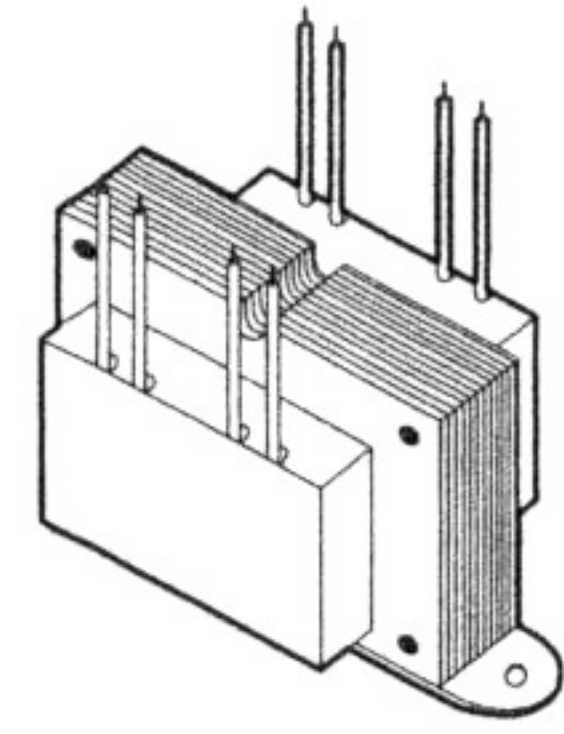
**Technical Notes**

1. Hi-pot tested at 1,500 VRMS.
2. Secondaries may be connected in series or parallel for expanded voltage and current ranges. See Control Transformer Connections diagram.
3. Transformer termination is solder lug.





# Control Transformers



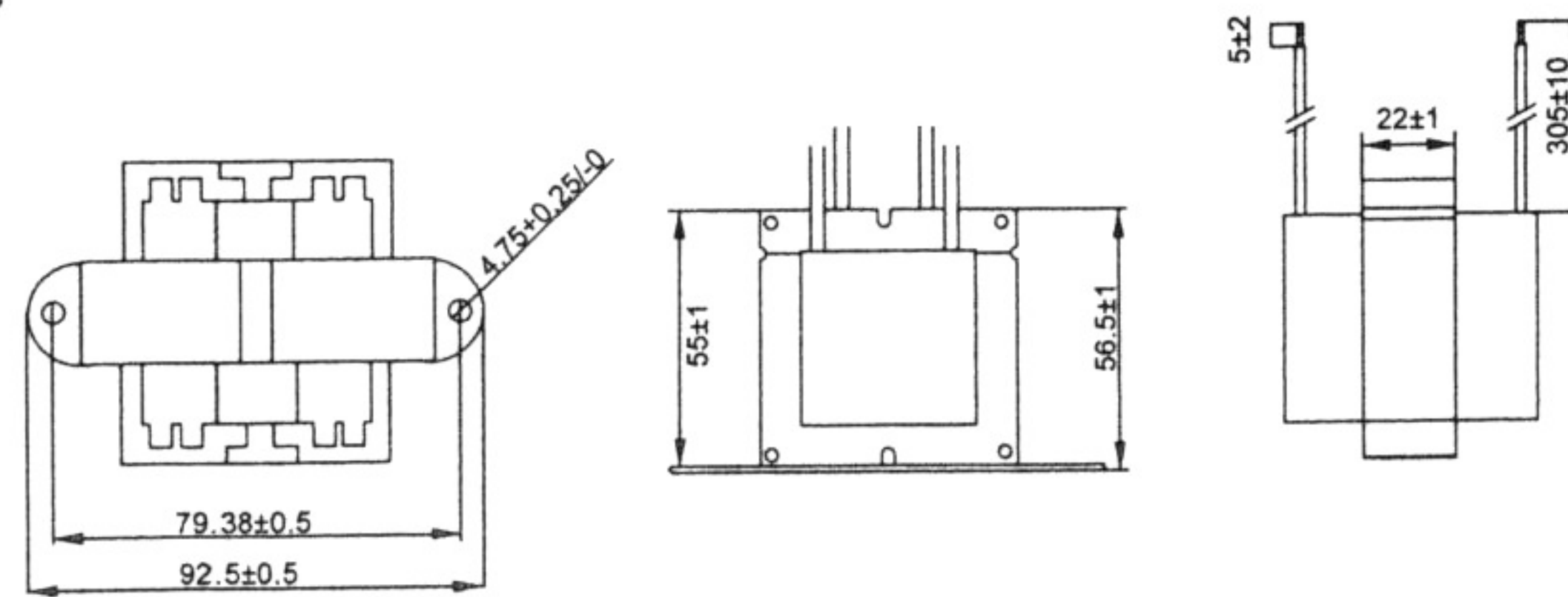
Triad control transformers come with tamper resistant shrouds for safety and steel bracket welded to the bottom of the transformer for ease of mounting.

**Maximum Power: 40VA**  
**Input (50/60 Hz): 120V, 240V, 120/208/240V, 120/240V, 208/240V**  
**Output: 12V, 24V**

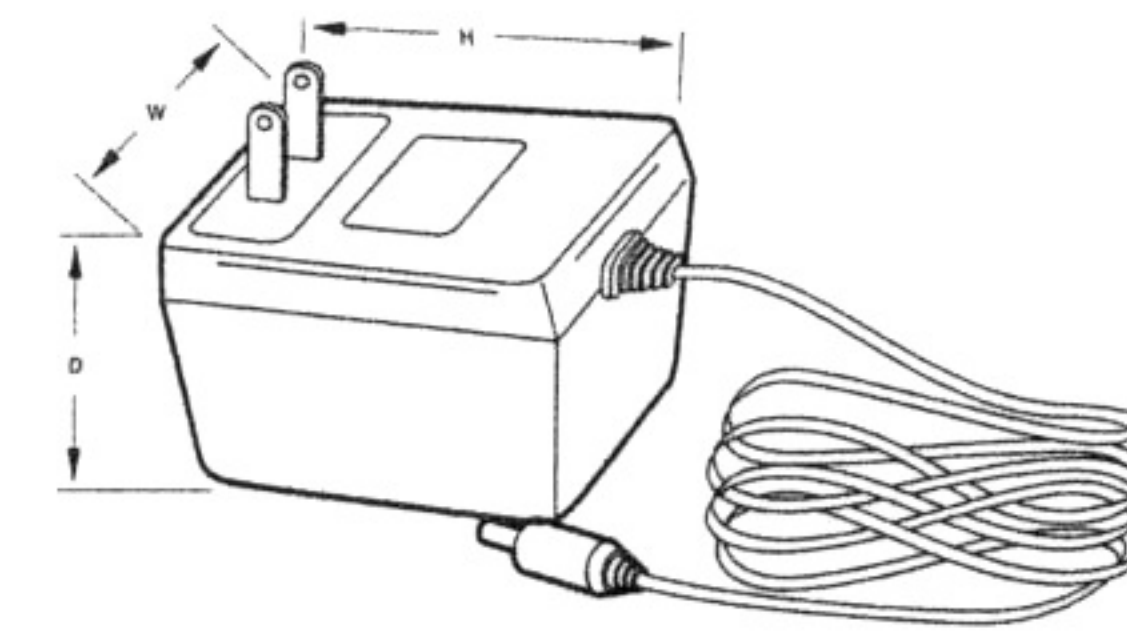
## Control Transformers

Type No.	Primaries	Secondary	VA	Connections	Dimensions (mm)			Mounting Dimensions	Wt. Lbs.
					H	W	D		
TCT40-01E07AB	120V	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-01E07K	120V	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-02E07AB	240V	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-02E07K	240V	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-05E07AB	120/208/240	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-05E07K	120/208/240	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-06E07AB	120/240	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-06E07K	120/240	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-09E07AB	208/240	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-09E07K	208/240	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-03E07AB	120V	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-03E07K	120V	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-04E07AB	240V	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-04E07K	240V	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-07E07AB	120/208/240	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-07E07K	120/208/240	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-08E07AB	120/240	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-08E07K	120/240	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-10E07AB	208/240	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-10E07K	208/240	12V	40	Leads	56.50	92.50	57.15	79.38	1.5

### Technical Notes [mm]



# Wall Plug-Ins



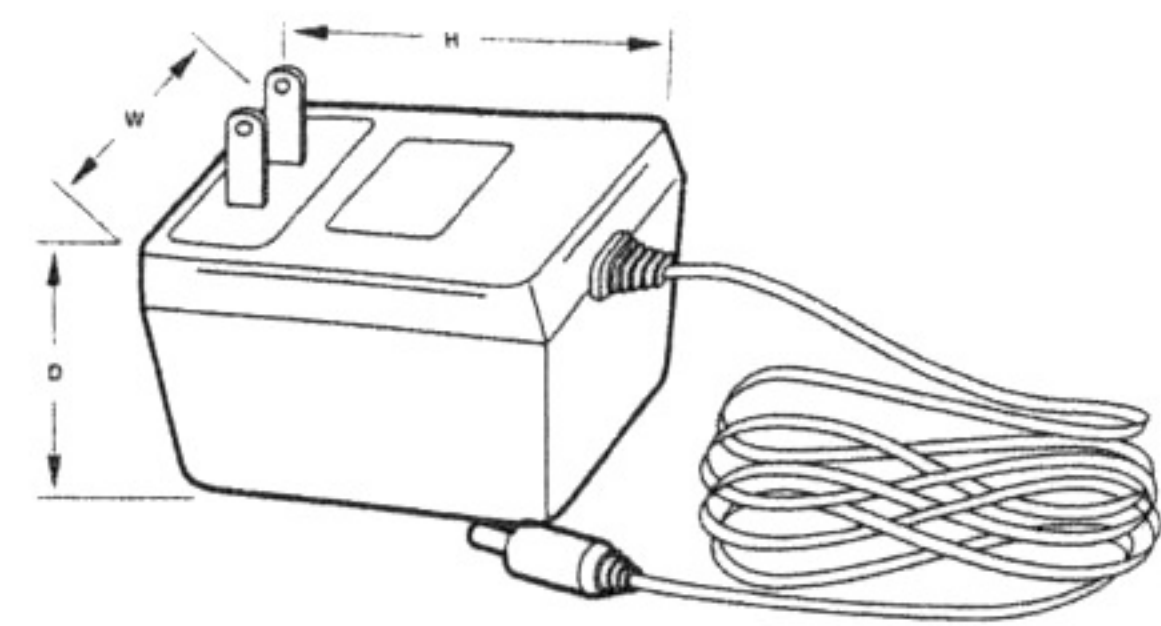
Triad prepackaged wall plug-in power supplies decrease product design time. These plug-in power sources eliminate the need for internal power supply cooling devices, thereby reducing the noise level, size and weight of the end product. In addition, these compact power sources keep heat away from sensitive circuits, and supply a safer lower output to the end product. Wall plug-in power sources are completely enclosed to prevent tampering. And since they carry many required agency listings, their use aids in gaining agency approvals. Offered in a wide range of popular voltages, the plug-in power sources are available in AC/DC unregulated models with generous six foot cord lengths. Available in 60 Hz only.

## Wall Plug-Ins

Type No.	Input		Output		Type	Dimensions (mm)		
	VAC	Watts	VDC	IDC (A)		H	W	D
WDU6-100	120	6.0	6.0	0.10	AC/DC Unreg.	56	43	37
WDU6-200	120	3.0	6.0	0.20	AC/DC Unreg.	60	43	39
WDU6-300	120	4.5	6.0	0.30	AC/DC Unreg.	60	43	39
WDU6-600	120	7.5	6.0	0.60	AC/DC Unreg.	70	50	41
WDU6-800	120	10.0	6.0	0.80	AC/DC Unreg.	70	50	41
WDU6-1000	120	12.0	6.0	1.00	AC/DC Unreg.	70	50	41
WDU6-1200	120	15.0	6.0	1.20	AC/DC Unreg.	70	50	41
WDU75-100	120	6.0	7.5	0.10	AC/DC Unreg.	56	43	37
WDU75-200	120	3.5	7.5	0.20	AC/DC Unreg.	60	43	39
WDU75-300	120	4.5	7.5	0.30	AC/DC Unreg.	60	43	39
WDU75-800	120	11.5	7.5	0.80	AC/DC Unreg.	70	50	41
WDU75-1000	120	15.0	7.5	1.00	AC/DC Unreg.	71	56	48
WDU9-100	120	2.3	9.0	0.10	AC/DC Unreg.	60	43	39
WDU9-300	120	5.0	9.0	0.30	AC/DC Unreg.	60	43	39
WDU9-500	120	18.5	9.0	0.50	AC/DC Unreg.	70	50	41
WDU9-1000	120	15.5	9.0	1.00	AC/DC Unreg.	80	60	48
WDU9-1200	120	18.5	9.0	1.20	AC/DC Unreg.	80	60	48
WDU9-2300	120	33.0	9.0	2.30	AC/DC Unreg.	85	68	55
WDU12-100	120	2.8	12.0	0.10	AC/DC Unreg.	60	43	39
WDU12-300	120	6.5	12.0	0.30	AC/DC Unreg.	70	50	41
WDU12-600	120	12.5	12.0	0.60	AC/DC Unreg.	80	60	48
WDU12-1200	120	23.5	12.0	1.20	AC/DC Unreg.	80	60	48
WDU12-1900	120	33.0	12.0	1.90	AC/DC Unreg.	85	68	55
WDU15-200	120	5.0	15.0	0.20	AC/DC Unreg.	60	43	39
WDU15-600	120	15.0	15.0	0.60	AC/DC Unreg.	80	60	48
WDU15-1000	120	24.0	15.0	1.00	AC/DC Unreg.	80	60	48
WDU15-1700	120	37.0	15.0	1.70	AC/DC Unreg.	85	68	55
WDU18-100	120	6.0	18.0	0.10	AC/DC Unreg.	56	43	37
WDU18-200	120	6.5	18.0	0.20	AC/DC Unreg.	70	50	41
WDU18-250	120	12.0	18.0	0.25	AC/DC Unreg.	64	51	41
WDU18-300	120	9.0	18.0	0.30	AC/DC Unreg.	70	50	41
WDU18-600	120	17.0	18.0	0.60	AC/DC Unreg.	80	60	48
WDU18-1000	120	27.5	18.0	1.00	AC/DC Unreg.	80	60	48
WDU18-1400	120	34.0	18.0	1.40	AC/DC Unreg.	85	68	55
WDU24-200	120	9.0	24.0	0.20	AC/DC Unreg.	60	43	39
WDU24-300	120	11.8	24.0	0.30	AC/DC Unreg.	70	50	41
WDU24-500	120	18.0	24.0	0.50	AC/DC Unreg.	80	60	48
WDU24-800	120	28.5	24.0	0.80	AC/DC Unreg.	80	60	48
WDU24-1200	120	38.0	24.0	1.20	AC/DC Unreg.	85	68	55

Note: Specifications subject to change without notice.

# Wall Plug-Ins



Triad prepackaged wall plug-in power supplies decrease product design time. These plug-in power sources eliminate the need for internal power supply cooling devices, thereby reducing the noise level, size and weight of the end product. In addition, these compact power sources keep heat away from sensitive circuits, and supply a safer lower output to the end product. Wall plug-in power sources are completely enclosed to prevent tampering. And since they carry many required agency listings, their use aids in gaining agency approvals. Offered in a wide range of popular voltages, the plug-in power sources are available in AC/AC unregulated models with generous six foot cord lengths. Available in 60 Hz only.

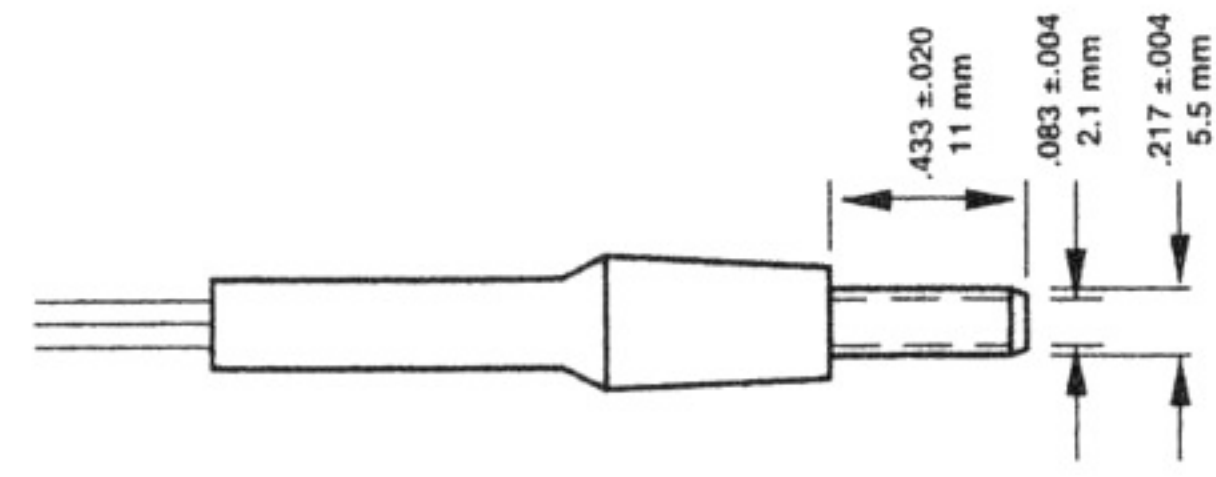
Specifications

Type No.	Input		Output		Type	Dimensions (mm)		
	VAC	Watts	VAC	IAC (A)		H	W	D
WAU12-200	120	4.0	12.0	0.20	AC/AC Unreg.	60	43	39
WAU12-500	120	8.8	12.0	0.50	AC/AC Unreg.	70	50	41
WAU12-1000	120	17.0	12.0	1.00	AC/AC Unreg.	70	50	41
WAU12-1500	120	24.0	12.0	1.50	AC/AC Unreg.	80	60	48
WAU12-2000	120	33.0	12.0	2.00	AC/AC Unreg.	80	60	48
WAU12-2500	120	38.0	12.0	2.50	AC/AC Unreg.	85	68	55
WAU16-400	120	9.0	16.0	0.40	AC/AC Unreg.	70	50	41
WAU16-500	120	11.2	16.0	0.50	AC/AC Unreg.	80	60	48
WAU16-1000	120	21.5	16.0	1.00	AC/AC Unreg.	80	60	48
WAU16-2400	120	47.0	16.0	2.40	AC/AC Unreg.	85	68	55
WAU20-200	120	6.0	20.0	0.20	AC/AC Unreg.	70	50	41
WAU20-500	120	13.5	20.0	0.50	AC/AC Unreg.	80	60	48
WAU20-2000	120	48.0	20.0	2.00	AC/AC Unreg.	85	68	55
WAU24-200	120	7.2	24.0	0.20	AC/AC Unreg.	70	50	41
WAU24-450	120	15.0	24.0	0.45	AC/AC Unreg.	70	50	41
WAU24-750	120	23.5	24.0	0.75	AC/AC Unreg.	80	60	48
WAU24-1000	120	32.0	24.0	1.00	AC/AC Unreg.	80	60	48
WAU24-1800	120	52.2	24.0	1.80	AC/AC Unreg.	85	68	55

Note: Specifications subject to change without notice.

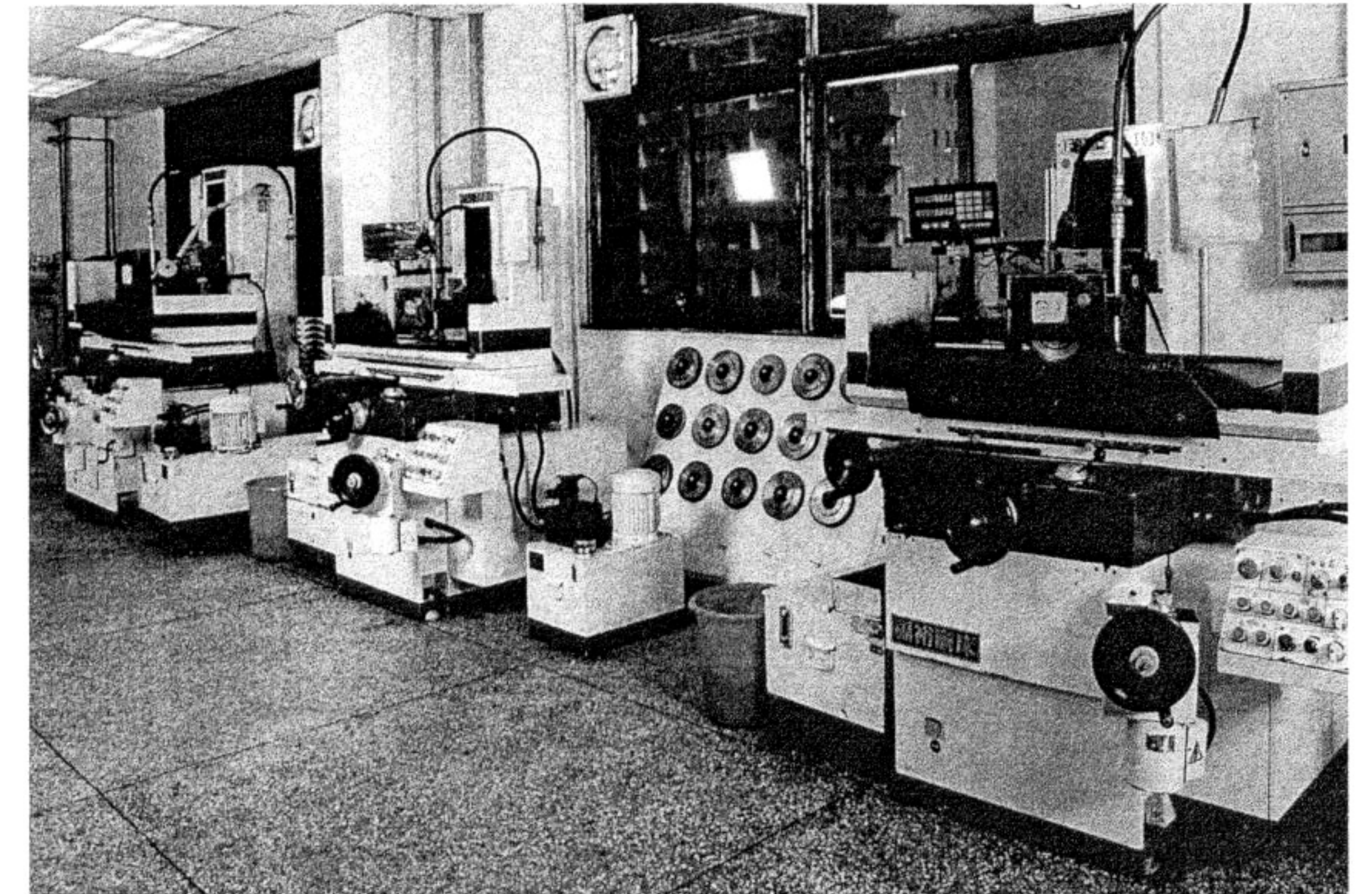
### Technical Notes

1. Inside (tip) - positive (+), outside - negative (-)
2. Plug use on DC and AC models

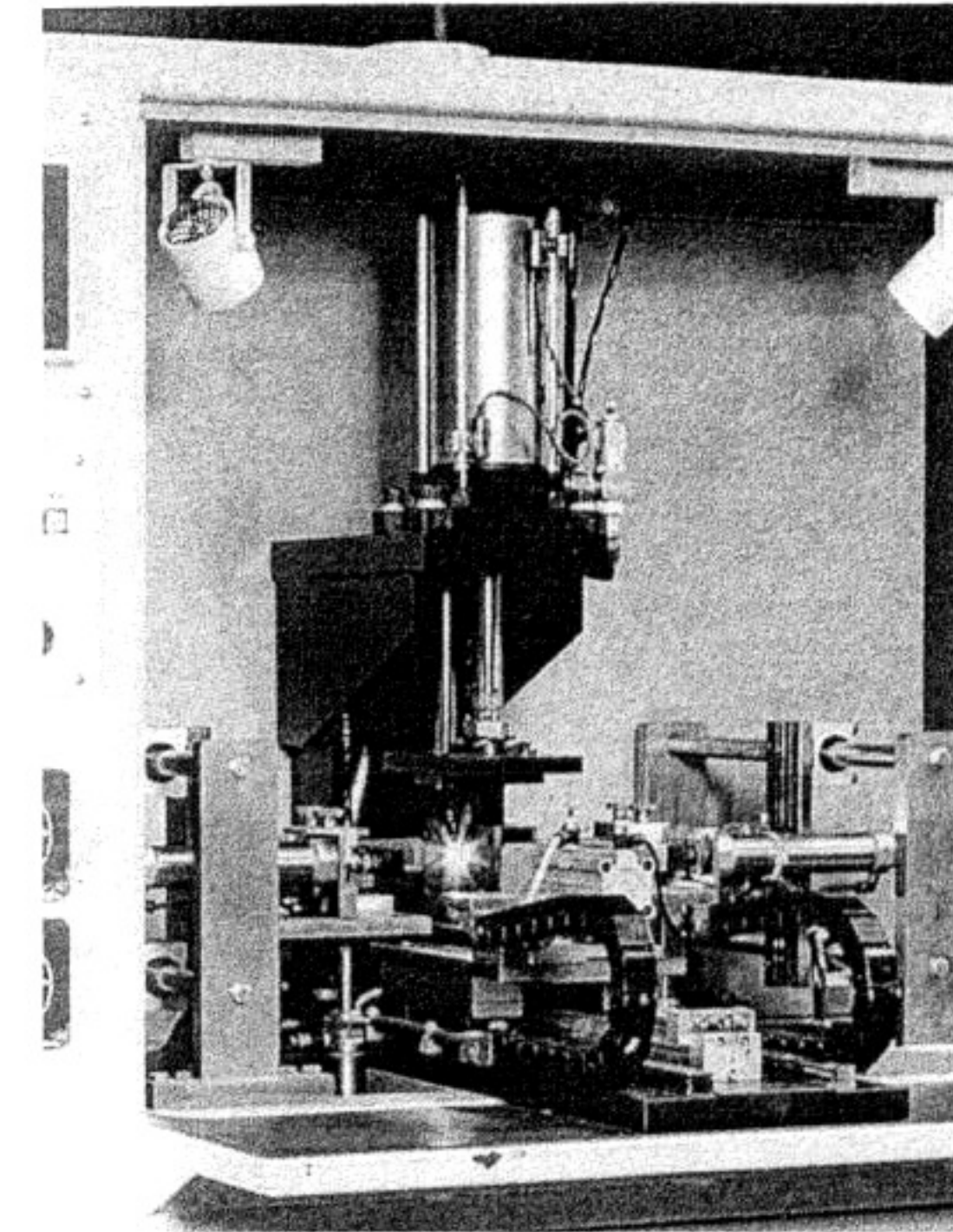


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When you look at Triad's long record of innovation combined with its present capabilities, high performance products,

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