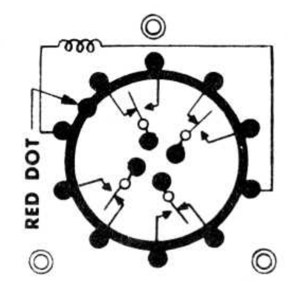
JM4 FOUR CAPSULES

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
8	JM4 101 41	HG4A-1046-4A1		MD-22-A4
10	JM4 102			
15	JM4 103			
25	JM4 104 41	HG4A-1041-4A1		
40	JM4 105 41	HG4A-1004-4A1		MD-23-A4
65	● JM4 106 41	HG4A-1013-4A1		
65	JM4 106 44	HG4A-1017-4A3		
100	JM4 107 41	HG4A-1012-4A1	MW-4618-21	
150	JM4 108 41	HG4A-1033-4A1		MD-24-A4
230	JM4 109 41	HG4A-1002-4A1		MD-25-A4
230	JM4 109 43	HG4A-1028-4A2		MD-26-B4
390	● JM4 110 41	HG4A-1011-4A1	MW-4620-11	MD-27-A4
390	JM4 110 44	HG4A-1016-4A3		MD-28-C4
645	JM4 111 41	HG4A-1008-4A1	MW-4623-11	
645	JM4 111 43	HG4A-1010-4A2		
700	● JM4 112 41	HG4A-1001-4A1		MD-29-A4
900	JM4 113 41	HG4A-1045-4A1		MD-30-A4
1400	● JM4 114 41	HG4A-1007-4A1	MW-4607-11	MD-31-A4
2400	JM4 115 41	HG4A-1014-4A1		MD-32-A4
3500	JM4 116 41	HG4A-1040-4A1		
4000	● JM4 117 41	HG4A-1003-4A1	MW-4603-11	MD-33-A4
6500	● JM4 118 41	HG4A-1005-4A1		MD-34-A4
10000	● JM4 119 41	HG4A-1006-4A1	MW-4606-11	
14000	JM4 120 41	HG4A-1015-4A1		MD-35-A4
23000	JM4 121			
58000	JM4 122 41	HG4A-1009-4A1		MD-37-A4
8	JM4 101 42	HG4B-1022-4B1		
10	JM4 102			
15	JM4 103			
25	JM4 104			
40	JM4 105 42	HG4B-1006-4B1	MW-4604-21	
65	JM4 106 42	HG4B-1013-4B1	MW-4624-21	
100	JM4 107 42	HG4B-1018-4B1	MW-4618-21	
150	JM4 108			
230	JM4 109 42	HG4B-1003-4B1	MW-4630-21	
230	JM4 109 46	HG4B-1025-4B6		
390	● JM4 110 42	HG4B-1014-4B1		
390	JM4 110 45	HG4B-1019-4B4		
645	JM4 111 42	HG4B-1002-4B1		
645	JM4 111 46	HG4B-1023-4B6		
700	JM4 112 42	HG4B-1001-4B1	MW-4609-21	
900	JM4 113			
1400	● JM4 114 42	HG4B-1005-4B1		
2400	JM4 115 42	HG4B-1037-4B1	MW-4637-21	
3500	JM4 116			
4000	● JM4 117 42	HG4B-1011-4B1	MW-4603-21	
6500	● JM4 118 42	HG4B-1015-4B1	MW-4615-21	
10000	● JM4 119 42	HG4B-1008-4B1		
14000	JM4 120			
23000	JM4 121 46	HG4B-1026-4B6		
58000	JM4 122			
8	JM4 101			
10	JM4 102			
15	JM4 103			
25	JM4 104 47	HG4C-1015-4C1		
40	JM4 105			
65	JM4 106			
100	JM4 107			
150	JM4 108			
230	JM4 109			
390	JM4 110 47	HG4C-1004-4C1		
645	JM4 111 47	HG4C-1010-4C1		
645	JM4 111	HG4C-1013-4C6	MW-4623-17	
700	JM4 112			
900	JM4 113			
1400	JM4 114 47	HG4C-1003-4C1	MW-4607-31	
2400	JM4 115			
3500	JM4 116			
4000	JM4 117	HG4C-1007-4C3		
6500	JM4 118 47	HG4C-1014-4C1		
10000	JM4 119 47	HG4C-1011-4C1		
14000	JM4 120			
23000	JM4 121 47	HG4C-1005-4C1		
58000	JM4 122			

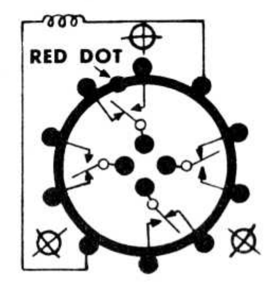
● Available From Distributors Stocks

JM4 TERMINATION DIAGRAMS



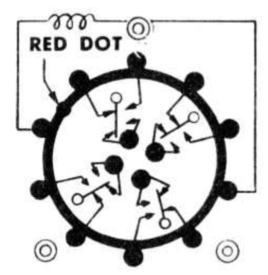
14-Pin Miniature Plug

P&B Fig. 41
CLARE Fig. 4A1
ADLAKE Fig. 411
AUT. ELEC. Fig. A4



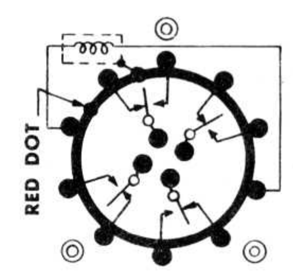
Hook Solder

Fig. 42
Fig. 4B1
Fig. 421



Miniature Plug

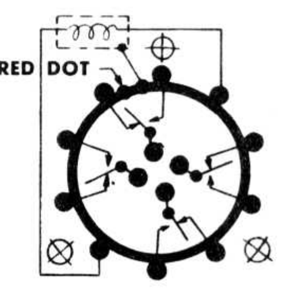
P&B Fig. 43
CLARE Fig. 4A2
ADLAKE Fig. 412
AUT. ELEC. Fig. B4



Shielded Coil Miniature Plug

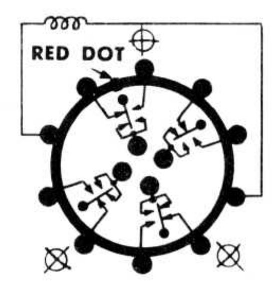
Fig. 44
Fig. 4A3

Fig. C4



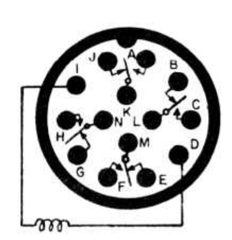
Electrostatically Shielded Contacts and Coil Hook Solder

P&B Fig. 45
CLARE Fig. 4B4
ADLAKE Fig. 424
AUT. ELEC.



Hook Solder

Fig. 46
Fig. 4B6
Fig. 426



A N Connector

P&B Fig. 47
CLARE Fig. 4C1
ADLAKE Fig. 431
AUT. ELEC.

A N Connector

FORM 13C168 10/66

PRINTED IN U.S.A.

COMPARISON CHART *for* POTTER & BRUMFIELD JM series mercury wetted contact relays

AVAILABLE JM RATINGS

Compatible with JM design, P&B can furnish: in addition to the coil resistances shown, any other resistance value desired; any termination configuration specified; shielded contacts or coils.

COMPETITIVE COMPARISONS

There is practically no limit to the various resistances and termination configurations which may be applied to mercury-wetted contact relays. However, for your convenience we have listed all competitive relays of which we have knowledge, and given the JM equivalent. Where P&B termination diagram figures have been omitted, it means simply that we have not yet assigned a figure number for them.

JMF NON-BRIDGING MODULES

TERMINATION DIAGRAMS

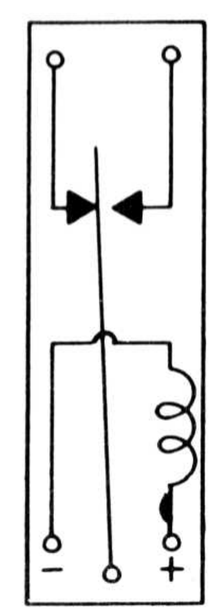


FIG. 61

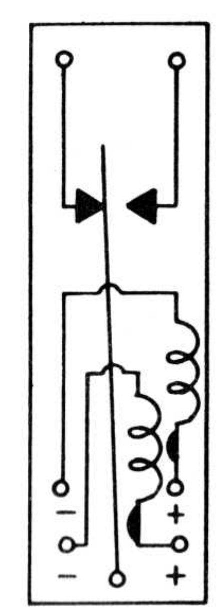


FIG. 62

Listings of comparisons of JMF modules Form C (non-bridging, SPDT, break-before-make) are replacements for Clare's HGSM 5000 series, and may also be used as replacements for Clare's HGSM 1000 series Form D if acceptable for the specific circuit. Adams & Westlake MWSA and MWCA series are Form C modules.

OHMS	P & B	CLARE	ADLAKE	STRUTHERS-DUNN
SINGLE-SIDE-STABLE				
18	JMF 1010 61	HGSM-1004	MWSA-16491	MVICB-B30-66.8
65	● JMF 1020 61	HGSM-1005	MWSA-16511 AWCA-16511	MVICB-B30-38.1
85	JMF 1030 61	HGSM-1006	MWSA-16331	MVICB-B30-33.3
90	JMF 1040 61	HGSM-1007	MWSA-16321	MVICB-B30-37.8
115	JMF 1050 61	HGSM-5008 HGSM-1008	MWSA-16121 AWCA-16121	MVICB-B30-30.0
275	JMF 1060 61	HGSM-1009	MWSA-16421	MVICB-B30-17.0
450	● JMF 1070 61	HGSM-5009 HGSM-1010	MSWA-16261 AWCA-16261	MVICB-B30-12.9
675	● JMF 1080 61	HGSM-5010 HGSM-1011	MWSA-16041 AWCA-16041	MVICB-B30-11.6
940	JMF 1090 61	HGSM-5011 HGSM-1002	MWSA-16351 AWCA-16351	MVICB-B30-10.4
950	JMF 1100 61	HGSM-5012 HGSM-1012	MWSA-16431	MVICB-B30-12.1
1250	JMF 1110 61	HGSM-1013	MWSA-16541 AWCA-16541	MVICB-B30-12.1A
1425	● JMF 1120 61	HGSM-5001 HGSM-1001	MWSA-16581 AWCA-16581	MVICB-B30-8.4
1800	JMF 1130 61	HGSM-1014	MWSA-16161	MVICB-B30-9.4
1950	JMF 1140 61	HGSM-5002 HGSM-1015	MWSA-16571 AWCA-16571	MVICB-B30-8.2
2400	● JMF 1150 61	HGSM-1003	MWSA-16011 AWCA-16011	MVICB-B30-7.8
4000	● JMF 1160 61		MWSA-16021	MVICB-B30-4.0
9200	JMF 1170 61		MWSA-16791	MVICB-B30-1.4
BI-STABLE				
18	JMF 5010 61	HGSM-1017	MWSA-16492	MVICP-B30-31.1
65	JMF 5020 61	HGSM-1018	MWSA-16512	MVICP-B30-17.8
85	JMF 5030 61	HGSM-1019	MWSA-16332	MVICP-B30-15.6
90	JMF 5040 61	HGSM-1020	MWSA-16322	MVICP-B30-17.6
115	JMF 5050 61	HGSM-1021	MWSA-16122	MVICP-B30-14.0
275	JMF 5060 61	HGSM-1022	MWSA-16422	MVICP-B30-8.0
450	JMF 5070 61	HGSM-1023	MWSA-16263	MVICP-B30-6.0
675	● JMF 5080 61	HGSM-1024	MWSA-16042	MVICP-B30-5.4
940	JMF 5090 61	HGSM-1025	MWSA-16352	MVICP-B30-4.9
950	JMF 5100 61	HGSM-1026	MWSA-16432	MVICP-B30-5.7
1250	JMF 5110 61	HGSM-1027	MWSA-16542	MVICP-B30-4.4
1425	JMF 5120 61	HGSM-1028	MWSA-16582	MVICP-B30
1800	JMF 5130 61	HGSM-1029	MWSA-16162	MVICP-B30
1950	JMF 5140 61	HGSM-1030	MWSA-16572	MVICP-B30-3.8
2400	JMF 5180 61	HGSM-1031	MWSA-16012	MVICP-B30-3.7
4000	JMF 5160 61		MWSA-16022	MVICP-B30-1.9
9200	JMF 5170 61		MWSA-16792	MVICP-B30-1.3
DUAL WOUND BI-STABLE				
1 460 2 460	JMF 5311 62		MWSA-16632	MVICP-B31-7.817.8
1 1100 2 1100	JMF 5321 62		MWSA-16642	MVICP-B31-5.6/5.6
1 1100 2 1100	JMF 5331 62		MWSA-16592	MVICP-B31-7.3/5.6

● Available from Distributor Stocks

POTTER & BRUMFIELD DIVISION OF AMERICAN MACHINE & FOUNDRY COMPANY
PRINCETON, INDIANA 47570 TELEPHONE: (312) 385-5251 TWX: 812-291-4125

JML NON-BRIDGING

SINGLE-SIDE-STABLE

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
2	JML 1010 81	HGS-1041-S1	MWSL-16051-1B	
5	JML 1020			
12	JML 1030 81		MWSL-16481-1B	
22	JML 1040 81	HGS-1008-S1	MWSL-16491-1B	
22	JML 1040 85	HGS-1057-S6	MWSL-16491-6B	
34	JML 1050			
40	JML 1060 81	HGS-1007-S1		
40	●JML 1061 81			
60	JML 1070 81	HGS-1060-S1	MWSL-16191-1B	
90	JML 1080 81	HGS-1015-S1	MWSL-16321-1B	
130	JML 1090 81	HGS-1012-S1	MWSL-16121-1B	
200	JML 1100 81	HGS-1011-S1	MWSL-16131-1B	
350	●JML 1110 81	HGS-1045-S1	MWSL-16421-1B	
500	JML 1120 81	HGS-1018-S1	MWSL-16261-1B	
500	JML 1120 84	HGS-1062-S5	MWSL-16261-5B	
600	JML 1130 81	HGS-1009-S1	MWSL-16401-1B	
700	JML 1140 81	HGS-1046-S1	MWSL-16041-1B	
800	JML 1150 81	HGS-1042-S1	MWSL-16351-1B	
800	JML 1150 84	HGS-1100-S5	MWSL-16351-5B	
800	JML 1151 81	HGS-1115-S1	MWSL-16352-1B	
1000	JML 1160 81	HGS-1014-S1	MWSL-16431-1B	
1000	●JML 1161 81	HGS-1066-S1	MWSL-16432-1B	
1000	JML 1162 81	HGS-1086-S1	MWSL-16433-1B	
1900	JML 1180 81	HGS-1010-S1	MWSL-16161-1B	
2500	●JML 1190 81	HGS-1006-S1	MWSL-16011-1B	
2500	JML 1190 84	HGS-1047-S5	MWSL-16011-5B	
2500	JML 1191 81	HGS-1064-S1	MWSL-16012-1B	
2500	JML 1192 81	HGS-1081-S1	MWSL-16013-1B	
4000	●JML 1200 81	HGS-1005-S1		
4000	JML 1201 81	HGS-1027-S1		
4000	JML 1200 84	HGS-1028-S5		
4000	JML 1200 85	HGS-1029-S6		
4000	JML 1201 84	HGS-1044-S5		
4000	JML 1201 83	HGS-1048-S4		
7000	JML 1220 81	HGS-1016-S1	MWSL-16091-1B	
11000	JML 1240 81	HGS-1017-S1		
11000	JML 1241 81	HGS-1097-S1		
17000	JML 1250 84	HGS-1038-S5		
25000	●JML 1260 81	HGS-1021-S1		
25000	JML 1261 81	HGS-1069-S1		
25000	JML 1262 83	HGS-1072-S4		

SINGLE-SIDE-STABLE (Shielded)

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
22	JML 1610 86*	HGS-1063-S7		
350	JML 1680 86*	HGS-1050-S7		
1 650 2 650	JML 1730 86*	HGS-1031-S7		
1400	JML 1750 86*	HGS-1075-S7		
4200	JML 1790 86*	HGS-1053-S7		
5000	JML 1800 86*	HGS-1089-S7	MWSL-16421-7B	

DUAL-WOUND SINGLE-SIDE-STABLE (Unshielded)

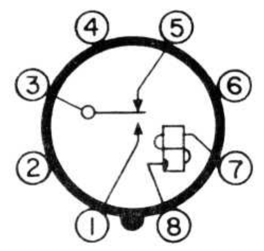
OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
1 250 2 250	JML 1380 82		MWSL-16211-3B	
1 700 2 700	JML 1420 82	HGS-1033-S3	MWSL-16461-3B	
1 700 2 3300	JML 1390 88	HGS-1020-S2	MWSL-16031-2B	
1 4000 2 800	●JML 1440 82			
1 1100 2 1100	JML 543082	HGS-5063		

BI-STABLE (Unshielded)

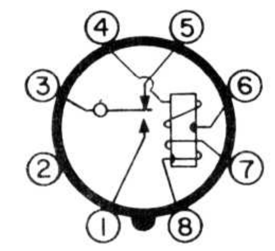
OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
2	JML 5010 81		MWSL-16052-1B	
12	JML 5030 81	HGS-1036-S1	MWSL-16482-1B	
22	JML 5040 81		MWSL-163492-1B	
40	JML 5060 81		MWSL-16192-1B	
90	JML 5080 81		MWSL-16322-1B	
130	JML 5090 81	HGS-1092-S1	MWSL-16122-1B	
200	JML 5100 81		MWSL-16132-1B	
350	JML 5110 81		MWSL-16422-1B	
500	JML 5120 81		MWSL-16262-1B	

● Available From Distributors Stocks
* Shielded Coil

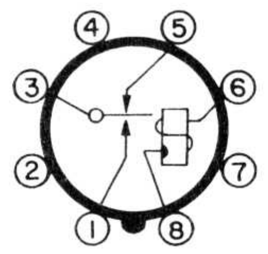
JML and JMC TERMINATION DIAGRAMS



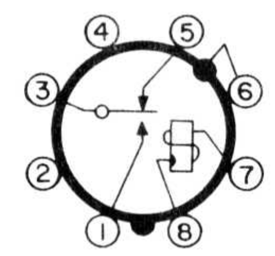
P&B Fig. 81
CLARE** Fig. S1
ADLAKE Fig. 1B
AUT. ELEC.



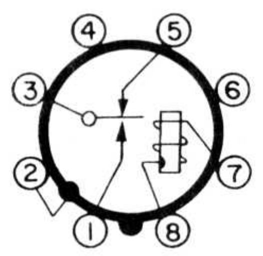
P&B Fig. 82
CLARE** Fig. S3
ADLAKE Fig. 3B
AUT. ELEC.



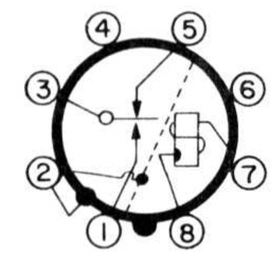
P&B Fig. 83
CLARE** Fig. S4
ADLAKE Fig. 4B
AUT. ELEC.



P&B Fig. 84
CLARE** Fig. S5
ADLAKE Fig. 5B
AUT. ELEC.

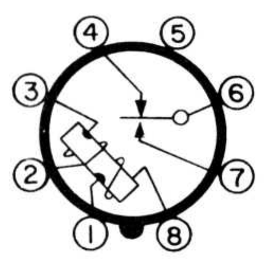


P&B Fig. 85
CLARE** Fig. S6
ADLAKE Fig. 6B
AUT. ELEC.

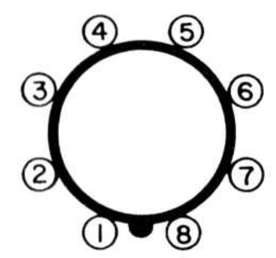


Shielded Coil

P&B Fig. 86
CLARE** Fig. S7
ADLAKE Fig. 7B
AUT. ELEC.



P&B Fig. 87
CLARE** Fig. S10
ADLAKE Fig. 10B
AUT. ELEC.



**All listings of comparisons of JML Form C (non-bridging) relays are with Clare's HGS-1000 Form D (bridging) series.

JML NON-BRIDGING (Cont'd)

BI-STABLE (Unshielded) (Cont'd)

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
600	JML 5130 81	HGS-1035-S1	MWSL-16402-1B	
700	JML 5140 81		MWSL-16042-1B	
800	JML 5150 81		MWSL-16353-1B	
1000	●JML 5160 81	HGS-1113-S1	MWSL-16434-1B	
1900	JML 5180 81		MWSL-16162-1B	
2500	JML 5190 81	HGS-1114-S1	MWSL-16014-1B	
4000	●JML 5200 81			
7000	JML 5220 81	HGS-1056-S1	MWSL-16092-1B	
11000	JML 5240 81			
17000	JML 5250 81			
25000	JML 5260 81	HGS-1096-S1		

DUAL BI-STABLE (Unshielded)

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
1 100 2 100	JML 5350 82	HGS-1087-S3		
1 250 2 250	JML 5380 82	HGS-1088-S3	MWSL-16212-3B	
1 700 2 700	JML 5420 82	HGS-1034-S3	MWSL-16462-3B	
1 700 2 3300	JML 5390 88	HGS-1085-S2	MWSL-16032-2B	
1 1100 2 1100	●JML 5430 82	HGS-1019-52		

CHOPPER

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
600	●JML 8130 81	HGS-1004-S1	MWSL-16403-1B	
600	JML 8130 84	HGS-1079-S5	MWSL-16403-5B	
600	JML 8720 86*			
650	JML 8730 86*	HGS-1084-S7		
4200	JML 8790 86*	HGS-1083-S7	MWSL-16403-7B	
7000	JML 8220 81	HGS-1058-S1	MWSL-16093-1B	

SINGLE-SIDE-STABLE

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
40	JML 1061 81	HGS-5009-S1		
200	JML 1100 81	HGS-5010-S1		
350	JML 1110 81	HGS-5011-S1		
1000	JML 1160 81	HGS-5015-S1		
2500	JML 1190 81	HGS-5003-S1		
4000	JML 1200 81	HGS-5008-S1		
7000	JML 1220 81	HGS-5014-S1		
25000	JML 1260 81	HGS-5016-S1		

BI-STABLE

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
600	JML 5130 81	HGS-5005-S1		
1000	JML 5160 81	HGS-5006-S1		
2500	JML 5190 81	HGS-5007-S1		
4000	JML 5200 81	HGS-5004- S1		
	JML 80005	HGS-5043		

CHOPPER

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
600	JML 8130 81	HGS-5017-S1		
	JML 5731 86*	HGS-5020-S7		
5000	JML 1800 86*	HGS-5018-S7		

● Available From Distributors Stocks
* Shielded Coil
† Bifilar Coil

JMC NON-BRIDGING

SINGLE-SIDE-STABLE

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
2.8	JMC 1010 83		MWS-16051-4B	
6.6	JMC 1020 81		MWS-16861-1B	
12	JMC 1030 81		MWS-16481-1B	
22	JMC 1040 81		MWS-16491-1B	
33	JMC 1050 85		MWS-16171-6B	
50	JMC 1060 81		MWS-16191-1B	
70	JMC 1070 81		MWS-16321-1B	
110	JMC 1080 86*		MWS-16121-7B	
195	JMC 1090 81		MWS-16131-1B	
275	JMC 1100	(D) HGSS-1008-S1		
330	JMC 1110 81	HGSS-5001-S1 (D) HGSS-1005-S1	MWS-16421-1B	
440	JMC 1120 81		MWS-16261-1B	
550	JMC 1130 81		MWS-16401-1B	
900	JMC 1140	(D) HGSS-1004-S1		
1050	JMC 1150 81	HGSS-5002-S1 (D) HGSS-1002-S1	MWS-16431-1B	
1375	JMC 1160 81		MWS-16541-1B	
2200	JMC 1170 81		MWS-16011-1B	
3850	JMC 1180 81	(D) HGSS-1003-S1	MWS-16021-1B	
4000	JMC 1191 81		MWS-16082-1B	
4000	JMC 1190 84		MWS-16081-5B	
6000	JMC 1200 81	(D) HGSS-1001-S1	MWS-16091-1B	
9400	JMC 1210 81	(D) HGSS-1009-S1	MWS-16701-1B	
10000	JMC 1220 81		MWS-16111-1B	
11000	JMC 1230 81		MWS-16721-1B	
14000	JMC 1240 81	(D) HGSS-1011-S1	MWS-16711-1B	
17000	JMC 1250 84		MWS-16411-5B	
25000	JMC 1260 81		MWS-16241-1B	
25000	JMC 1261 81		MWS-16242-1B	
25000	JMC 1262 83		MWS-16243-4B	
1 1000 2 1000	JMC 1300 82		MWS-16101-3B	
1 1100 2 1100	JMC 1310 82			
1 7500 2 7500	JMC 1320 82			
1 11500 2 11500	JMC 1330 82		MWS-16451-3B	

BI-STABLE

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
2.8	JMC 5010 81		MWS-16052-1B	
6.6	JMC 5020 81		MWS-16862-1B	
12	JMC 5030 81		MWS-16482-1B	
22	JMC 5040 81		MWS-16492-1B	
33	JMC 5050 81		MWS-16172-1B	
50	JMC 5060 81		MWS-16192-1B	
70	JMC 5070 81		MWS-16322-1B	
110	JMC 5080 81		MWS-16122-1B	
195	JMC 5090 81		MWS-16132-1B	
275	JMC 5100	(D) HGSS-1013-S1		
330	JMC 5110 81		MWS-16422-1B	
440	JMC 5120 81		MWS-16262-1B	
550	JMC 5130 81		MWS-16402-1B	
900	JMC 5140			
1050	JMC 5150 81		MWS-16432-1B	
1375	JMC 5160 81		MWS-16542-1B	
2200	JMC 5170 81		MWS-16012-1B	
3850	JMC 5180 81	(D) HGSS-1014-S1	MWS-16022-1B	
4000	JMC 5190 81		MWS-16083-1B	
6000	JMC 5200 84		MWS-16092-5B	
9400	JMC 5210 81		MWS-16702-1B	
10000	JMC 5220 81		MWS-16112-1B	
11000	JMC 5230 81		MWS-16722-1B	
14000	JMC 5240 81	(D) HGSS-1012-S1	MWS-16712-1B	
17000	JMC 5250 81		MWS-16412-1B	
25000	JMC 5260 81		MWS-16244-1B	
1 1000 2 1000	JMC 5300 87	(D) HGSS-1010-S10	MWS-16102-10B	
1 1100 2 1100	† JMC 5310 82			
1 7500 2 7500	JMC 5320 82		MWS-16202-3B	
1 11500 2 11500	JMC 5330 82		MWS-16452-3B	

Some comparisons of JMC Form C (non-bridging) relays are with Clare's HGSS-1000 Form D (bridging) series. In these instances the letter (D) precedes their listings.

JMP POLARIZED

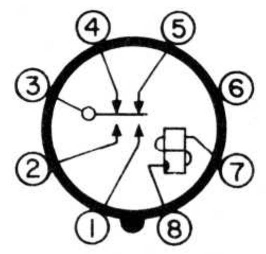
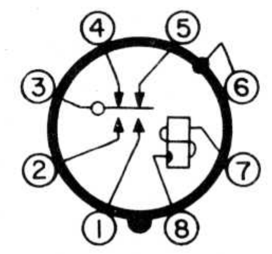
OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
SINGLE-SIDE-STABLE				
2	JMP 1010 11	HGP-1048	MWP-16051-1	MD-38-A1
5	JMP 1020 11	HGP-1117	MWP-16861-1	
34	JMP 1050 11	HGP-1017	MWP-16171-1	
90	JMP 1080 11	HGP-1007	MWP-16331-1	
90	● JMP 1081 11	HGP-1001	MWP-16321-1	
90	JMP 1081 12			
90	JMP 1081 14*	HGP-1039		
130	JMP 1090 11	HGP-1102	MWP-16121-1	MD-39-A1
200	JMP 1100 11	HGP-1101	MWP-16131-1	
350	JMP 1110 17	HGP-1035	MWP-16422-11	MD-41-L1
350	JMP 1111 11	HGP-1103	MWP-16421-1	MD-40-A1
500	JMP 1120 11	HGP-1104	MWP-16261-1	
800	JMP 1150 11	HGP-1067	MWP-16351-1	
1000	● JMP 1160 11	HGP-1005	MWP-16431-1	
1000	JMP 1161 11	HGP-1015	MWP-16432-1	
1000	JMP 1162 11	HGP-1041	MWP-16433-1	
1100	JMP 1410 14*	HGP-1037	MWP-16434-10	
1900	JMP 1180 11	HGP-1058	MWP-16161-1	
2500	JMP 1190 11	HGP-1106	MWP-16011-1	MD-42-A1
3750	JMP 1420 14*	HGP-1043		
4000	● JMP 1200 11	HGP-1002	MWP-16021-1	MD-43-A1
4000	JMP 1201 11	HGP-1008	MWP-16023-1	MD-44-A1
4000	JMP 1202 11	HGP-1011	MWP-16024-1	MD-45-A1
4000	JMP 1203 11	HGP-1128	MWP-16027-1	MD-46-A1
4000	JMP 1204 11	HGP-1016	MWP-16022-1	
4000	JMP 1204 12	HGP-1096		MD-47-B1
7000	JMP 1220 11	HGP-1055	MWP-16091-1	MD-48-A1
7000	JMP 1221 11	HGP-1060	MWP-16092-1	
7000	JMP 1222 11	HGP-1073	MWP-16093-1	
11300	JMP 1430 14*	HGP-1064	MWP-16114-10	
25000	● JMP 1260 11	HGP-1050	MWP-16241-1	MD-51-A1
25000	JMP 1261 11	HGP-1065	MWP-16242-1	
DUAL-WOUND COIL				
1 250 2 250	JMP 1330 57	HGP-1084	MWP-16211-13	
1 700 2 3300	● JMP 1340 52	HGP-1006	MWP-16031-3	MD-52-G1
1 700 2 3300	JMP 1340 51	HGP-1021		
1 1800 2 1775	JMP 1360 51	HGP-1022		
1 1800 2 1775	JMP 1360 57	HGP-1094	MWP-16251-13	
1 7500 2 7500	JMP 1370 52	HGP-1100	MWP-16202-3	
1 1020 2 970	● JMP 1470 53*	HGP-1010	MWP-16101-5	MD-53-M1
BI-STABLE				
34	JMP 5050 11	HGP-1127	MWP-16172-1	
200	JMP 5100 11	HGP-1049	MWP-16132-1	
600	JMP 5130 11	HGP-1047	MWP-16402-1	MD-54-A1
4000	● JMP 5200 11	HGP-1003		MD-55-A1
4000	JMP 5200 13	HGP-1062	MWP-16025-9	MD-56-D1
11000	JMP 5240	HGP-1066	MWP-16112-1	
1 100 2 100	JMP 5300 52	HGP-1057	MWP-16522-3	MD-58-G1
1 250 2 250	JMP 5330 57	HGP-1109	MWP-16212-13	MD-59-K1
1 700 2 3300	● JMP 5340 52	HGP-1012	MWP-16032-3	MD-60-G1
1 1800 2 1775	JMP 5360 51	HGP-1070	MWP-16252-2	
1 1800 2 1775	JMP 5360 52	HGP-1115		
1 7500 2 7500	JMP 5370 52	HGP-1031		
1 7500 2 7500	JMP 5370 54	HGP-1111		
1 7500 2 7500	JMP 5370 56	HGP-1020	MWP-16201-8	MD-62-J1
1 11500 2 11500	JMP 5380 54	HGP-1051	MWP-16452-6	
1 11500 2 11500	JMP 5380 56	HGP-1044		
1 1020 2 970	JMP 5470 53*	HGP-1125	MWP-16102-5	MD-61-M1

JMP POLARIZED (Cont'd)

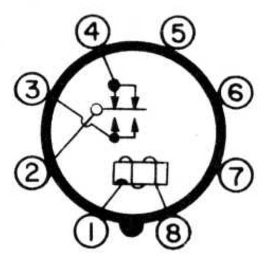
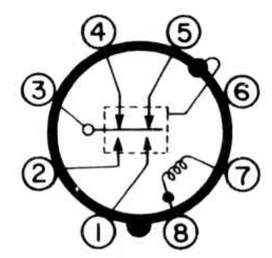
OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
CHOPPER				
500	JMP 8120 11	HGP-1018		
500	● JMP 8120 12	HGP-1028	MWP-16263-4	MD-63-B1
600	JMP 8400 14*	HGP-1036	MWP-16403-10	
3750	JMP 8420 14*	HGP-1034		
4000	JMP 8200 11	HGP-1004		MD-64-A1
4000	● JMP 8200 12	HGP-1009	MWP-16026-4	
11000	● JMP 8240 11	HGP-1045	MWP-16113-1	MD-65-A1
21000	JMP 8440 14*	HGP-1030	MWP-16243-10	

● Available From Distributors Stocks
* Shielded Coil

JMP and JM1 SINGLE COIL TERMINATION DIAGRAMS

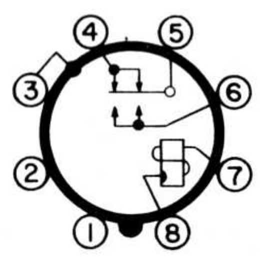
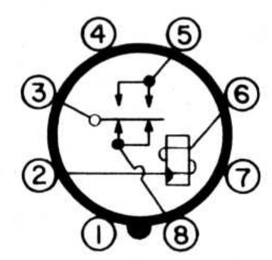



P&B	Fig. 11	Fig. 12
CLARE	Fig. 1	Fig. 4
ADLAKE	Fig. 1	Fig. 4
AUT. ELEC.	Fig. A1	Fig. B1

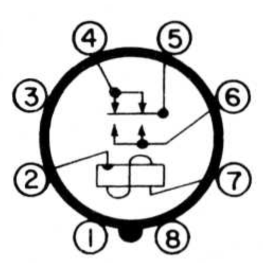
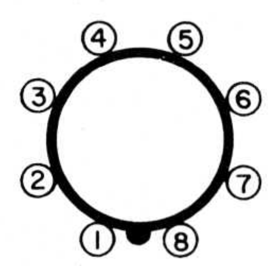



Electrostatically Shielded Contacts

P&B	Fig. 13	Fig. 14
CLARE	Fig. 9	Fig. 10
ADLAKE	Fig. 9	Fig. 10
AUT. ELEC.	Fig. D1	

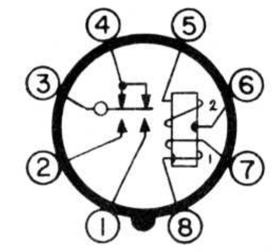
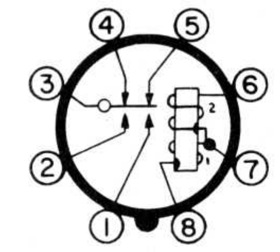



P&B	Fig. 15	Fig. 16
CLARE	Fig. 12	Fig. 18
ADLAKE		
AUT. ELEC.	Fig. C1	Fig. E1

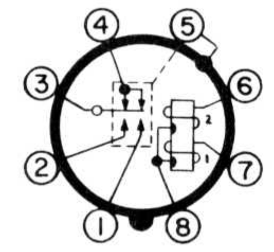
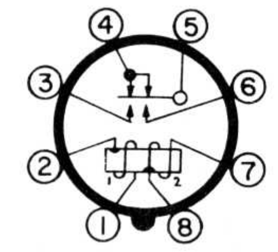



P&B	Fig. 17	
CLARE	Fig. 11	
ADLAKE	Fig. 11	
AUT. ELEC.	Fig. L1	

JMP and JM1 DUAL-WOUND COIL TERMINATION DIAGRAMS

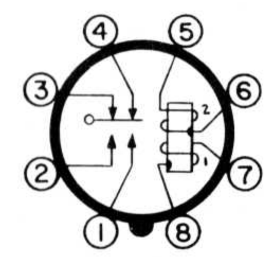
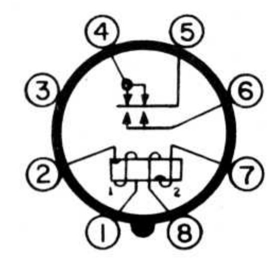



P&B	Fig. 51	Fig. 52
CLARE	Fig. 2	Fig. 3
ADLAKE	Fig. 2	Fig. 3
AUT. ELEC.	Fig. F1	Fig. G1

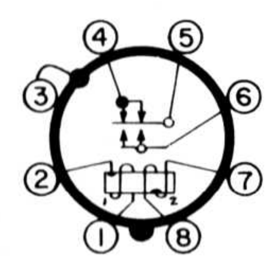
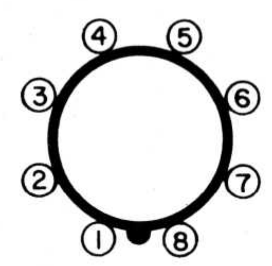



Electrostatically Shielded Contacts

P&B	Fig. 53	Fig. 54
CLARE	Fig. 5	Fig. 6
ADLAKE	Fig. 5	Fig. 6
AUT. ELEC.	Fig. M1	Fig. H1

P&B	Fig. 55	Fig. 56
CLARE	Fig. 7	Fig. 8
ADLAKE	Fig. 7	Fig. 8
AUT. ELEC.		Fig. J1

P&B	Fig. 57	
CLARE	Fig. 13	
ADLAKE	Fig. 13	
AUT. ELEC.	Fig. K1	

Note: Series JM1 300 single capsule relays can be supplied with an electrostatically shielded capsule. See Figures 14 and 53 for wiring configurations. The coil data shown here does not apply to shielded capsules. For data on Series JM1 300 consult the factory.

JM1 SINGLE CAPSULE

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
2	JM1 101 11	HG-1005 1	MW-1605-1	
5	JM1 102 11	HG-1086 1	MW-1686-1	MC-16-A1
12	JM1 103 11	HG-1096 1		
22	JM1 104 11	HG-1054 1		
34	JM1 105 11	HG-1047 1		
40	●JM1 106 12	HG-1019 4	MW-1619-4	MC-27-B1
60	JM1 107 11	HG-1082-1		
90	JM1 108 11	HG-1032-1	MW-1632-1	
130	JM1 109 11	HG-1049-1	MW-1612-1	MC-18-A1
130	●JM1 109 12	HG-1012 4	MW-1612-4	MC-28-B1
200	JM1 110 11	HG-1053 1	MW-1613-1	
200	JM1 110 12	HG-1079 4		
350	JM1 111 11	HG-1042 1	MW-1642-1	MC-19-A1
500	●JM1 112 11	HG-1026 1	MW-1626-1	
600	JM1 113 14	HG-1056 10		
700	●JM1 114 11	HG-1004 1	MW-1604-1	MC-20-A1
700	●JM1 114 12	HG-1051 4		MC-29-B1
800	JM1 115			
1000	JM1 116 11	HG-1043 1	MW-1643-1	
1900	JM1 117 11	HG-1016 1	MW-1616-1	MC-21-A1
2500	●JM1 118 11	HG-1001 1	MW-1601-1	MC-22-A1
2500	JM1 118 12	HG-1013 4	MW-1601-4	MC-30-B1
4000	●JM1 119 11	HG-1002 1	MW-1602-1	MC-23-A1
4000	●JM1 119 12	HG-1017 4	MW-1602-4	MC-31-B1
4000	JM1 119 15	HG-1036 12		MC-32-C1
4000	JM1 119 16	HG-1064 18		MC-33-E1
7000	●JM1 120 11	HG-1009 1	MW-1609-1	MC-24-A1
7000	JM1 120 13	HG-1018 9	MW-1609-9	MC-34-D1
11000	●JM1 121 11	HG-1011 1	MW-1611-1	MC-25-A1
17000	JM1 122 11	HG-1041 1	MW-1641-1	
25000	●JM1 123 11	HG-1024 4	MW-1624-1	MC-26-A1
25000	JM1 123 12	HG-1062 2		MC-35-B1
DUAL-WOUND COIL				
1 100 2 100	JM1 401 51	HG-1060 2		MC-36-F1
1 100 2 1000	JM1 402			
1 120 2 125	JM1 403 54	HG-1006 6	MW-1606-6	
1 250 2 250	JM1 404 52	HG-1021-3		MC-37-G1
1 700 2 3300	●JM1 405 51	HG-1003 2	MW-1603-2	MC-39-F1
1 700 2 3300	JM1 405 56	HG-1008 8	MW-1603-8	MC-40-J1
1 700 2 3300	JM1 405 57	HG-1046 13		MC-41-K1
1 1029 2 970	JM1 406			
1 1800 2 1775	JM1 407			
1 7500 2 7500	JM1 408 52	HG-1066 3		MC-42-Gl

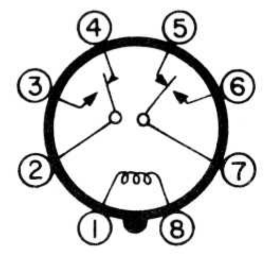
● Available From Distributors Stocks

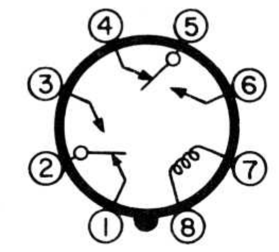
JM2 TWO CAPSULES

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
3	JM2 101 22	HG2A-1084-2A2		MC-43-A2
14	JM2 102 22	HG2A-1014-2A2	MW-2614-12	MC-44-A2
22	JM2 122 21	HG2A-1064-2A1		
35	JM2 103 22	HG2A-1045-2A2	MW-2645-12	MC-45-A2
50	● JM2 104 22	HG2A-1008-2A2	MW-2608-12	MC-46-A2
50	JM2 104	HG2A-1032-2A6		
50	JM2 104	HG2A-1039-2A9		
50	JM2 104	HG2A-1050-2A13		
50	JM2 104 27	HG2A-1073-2A7		MC-50-G2
85	JM2 105 21	HG2A-1034-2A1		
140	● JM2 106 21	HG2A-1042-2A1		
140	JM2 106 22	HG2A-1030-2A2	MW-2630-12	MC-51-A2
215	JM2 107 22	HG2A-1072-2A2		
250	JM2 108 22	HG2A-1023-2A2		MC-52-A2
250	JM2 108 26	HG2A-1040-2A3		MC-53-B2
315	● JM2 109 22	HG2A-1003-2A2	MW-2603-12	MC-54-A2
315	JM2 109 21	HG2A-1029-2A1		MC-55-C2
315	JM2 109 27	HG2A-1033-2A7		MC-56-G2
315	JM2 109	HG2A-1044-2A12		
315	JM2 109 25	HG2A-1078-2A4		MC-58-J2
500	● JM2 110 22	HG2A-1017-2A2	MW-2617-12	MC-59-A2
500	JM2 110 26	HG2A-1028-2A3		MC-60-B2
500	JM2 110	HG2A-1038-2A8		
700	● JM2 111 22	HG2A-1002-2A2	MW-2602-12	MC-62-A2
700	JM2 111 21	HG2A-1009-2A1		MC-63-C2
700	JM2 111 25	HG2A-1020-2A4		MC-66-J2
700	JM2 111	HG2A-1041-2A10		
700	JM2 111 27	HG2A-1069-2A7		MC-65-G2
700	JM2 111	HG2A-1070-2A6		
1250	● JM2 112 22	HG2A-1015-2A2	MW-2615-12 (1230 ohms)	MC-68-A2
1250	JM2 112 21	HG2A-1022-2A1		MC-69-C2
1250	JM2 112 27	HG2A-1031-2A7		MC-71-G2
1250	JM2 112 25	HG2A-1051-2A4		MC-72-J2
1250	JM2 112	HG2A-1074-2A13		
2000	JM2 113			
2500	JM2 114 22	HG2A-1007-2A2		MC-73-A2
2500	JM2 114 21	HG2A-1068-2A1	MW-2607-11	MC-74-C2
5000	JM2 115 21	HG2A-1001-2A1	MW-2601-11	MC-77-C2
5000	● JM2 115 22	HG2A-1004-2A2	MW-2601-12	MC-75-A2
5000	JM2 115 26	HG2A-1024-2A3		MC-76-B2
5000	JM2 115	HG2A-1027-2A6		
5000	JM2 115 25	HG2A-1034-2A4		MC-80-J2
5000	JM2 115 27	HG2A-1071-2A7		MC-79-G2
7100	JM2 116 22	HG2A-1005-2A2	MW-2605-12	MC-81-A2
7100	JM2 116 21	HG2A-1025-2A1		MC-82-C2
10000	JM2 117 22	HG2A-1013-2A2		MC-83-A2
10000	JM2 117 21	HG2A-1018-2A1	MW-2619-11	MC-85-C2
10000	JM2 117 26	HG2A-1019-2A3	MW-2619-13	MC-84-B2
10000	JM2 117 25	HG2A-1046-2A4		MC-86-J2
12500	JM2 118 22	HG2A-1012-2A2		MC-87-A2
12500	JM2 118 25	HG2A-1036-2A4		MC-88-J2
20000	JM2 119 22	HG2A-1026-2A2	MW-2626-12	MC-89-A2
32000	JM2 120 22	HG2A-1010-2A2	MW-2610-12	MC-90-A2
32000	JM2 120	HG2A-1083-2A8		
45000	JM2 121 22	HG2A-1016-2A2	MW-2616-12	MC-92-A2
3	JM2 101			
14	JM2 102			
35	JM2 103 23	HG2B-1005-2B1	MW-2645-21	
50	JM2 104 23	HG2B-1009-2B1		
50	JM2 104 24	HG2B-1017-2B2		
85	JM2 105 23	HG2B-1018-2B1		
85	JM2 105 24	HG2B-1023-2B2		
140	JM2 106 24	HG2B-1043-2B2		
215	JM2 107			
250	JM2 108 24	HG2B-1033-2B2	MW-2623-22	
315	JM2 109 24	HG2B-1024-2B2		
500	JM2 110 23	HG2B-1013-2B1		
500	JM2 110 24	HG2B-1015-2B2		
500	JM2 110	HG2B-1029-2B6		
700	JM2 111 23	HG2B-1001-2B1		
700	JM2 111 24	HG2B-1020-2B2		
700	JM2 111	HG2B-1021-2B5		
700	JM2 111 24	HG2B-1031-2B2		
1250	JM2 112	HG2B-1006-2B4		
1250	● JM2 112 23	HG2B-1010-2B1		
1250	JM2 112 24	HG2B-1012-2B2		
2000	JM2 113			
2500	JM2 114 23	HG2B-1007-2B1		
5000	● JM2 115 23	HG2B-1003-2B1		
5000	JM2 115	HG2B-1004-2B4		
5000	JM2 115 24	HG2B-1008-2B2		
7100	JM2 116 23	HG2B-1014-2B1		
7100	JM2 116 24	HG2B-1038-2B2		
10000	JM2 117 23	HG2B-1011-2B1		
10000	JM2 117 24	HG2B-1032-2B2		
32000	JM2 118 24	HG2B-1022-2B2		
45000	JM2 119			

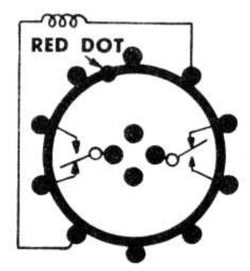
● Available From Distributors Stocks

JM2
TERMINATION DIAGRAMS

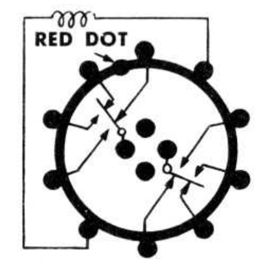




P&B	Fig. 21	Fig. 22
CLARE	Fig. 2A1	Fig. 2A2
ADLAKE	Fig. 211	Fig. 212
AUT. ELEC.	Fig. C2	Fig. A2

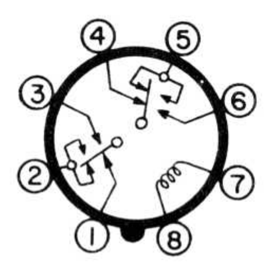


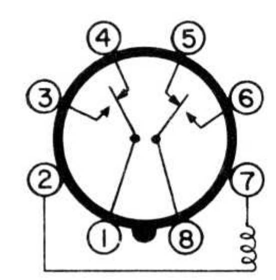
Hook Solder



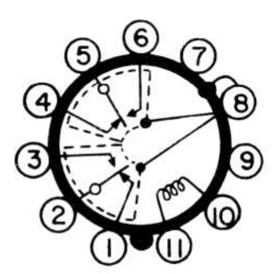
Hook Solder

P&B	Fig. 23	Fig. 24
CLARE	Fig. 2B1	Fig. 2B2
ADLAKE	Fig. 221	Fig. 222
AUT. ELEC.		

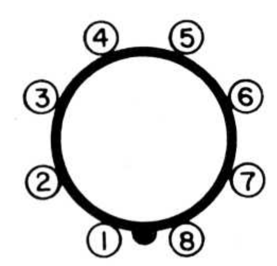




P&B	Fig. 25	Fig. 26
CLARE	Fig. 2A4	Fig. 2A3
ADLAKE	Fig. 214	Fig. 213
AUT. ELEC.	Fig. J2	Fig. B2



Electrostatically Shielded Contacts

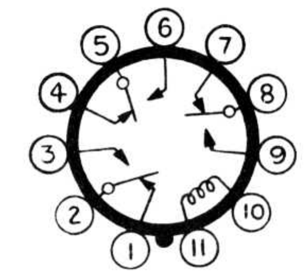


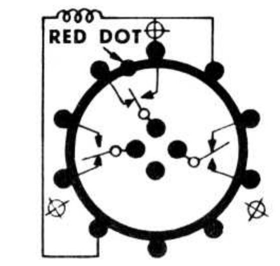
P&B	Fig. 27
CLARE	Fig. 2A7
ADLAKE	
AUT. ELEC.	Fig. G2

JM3 THREE CAPSULES

OHMS	P & B	CLARE	ADLAKE	AUT. ELEC.
3	JM3 101			
14	JM3 102 31	HG3A-1014-3A1		MC-93-A3
35	JM3 103 31	HG3A-1018-3A1	MW-3611-11	MC-94-A3
50	JM3 104 31	HG3A-1001-3A1	MW-3601-11	MC-95-A3
50	JM3 104 33	HG3A-1024-3A3		MC-96-B3
85	JM3 105 31	HG3A-1036-3A1		
85	JM3 105	HG3A-1037-3A4		
140	JM3 106 31	HG3A-1022-3A1	MW-3612-11	MC-97-A3
215	JM3 107 31	HG3A-1028-3A1		
250	JM3 108 31	HG3A-1013-3A1		MC-98-A3
315	● JM3 109 31	HG3A-1004-3A1	MW-3604-11	MC-99-A3
500	● JM3 110 31	HG3A-1006-3A1	MW-3606-11	MD-10-A3
700	● JM3 111 31	HG3A-1002-3A1	MW-3602-11	MD-11-A3
700	JM3 111	HG3A-1026-3A4		
1250	● JM3 112 31	HG3A-1008-3A1	MW-3608 11 (1230 ohms)	MD-13-A3
2000	JM3 113 31	HG3A-1023-3A1		
2500	JM3 114 31	HG3A-1005-3A1	MW-3607-11	MD-14-A3
5000	● JM3 115 31	HG3A-1003-3A1	MW-3603-11	MD-15-A3
7100	JM3 116 31	HG3A-1009-3A1	MW-3605-11	MD-16-A3
10000	JM3 117 31	HG3A-1010-3A1	MW-3610-11	MD-17-A3
10000	JM3 117 33	HG3A-1019-3A3		MD-18-B3
12500	JM3 118 31	HG3A-1007-3A1	MW-3609-11	MD-19-A3
20000	JM3 119 31	HG3A-1011-3A1		MD-20-A3
32000	JM3 120			
45000	JM3 121 31	HG3A-1016-3A1		MD-21-A3
3	JM3 101			
14	JM3 102			
35	JM3 103			
50	JM3 104 32	HG3B-1004-3B1		
85	JM3 105			
140	JM3 106 32	HG3B-1036-3B1		
215	JM3 107			
250	JM3 108			
315	JM3 109 32	HG3B-1007 3B1		
500	JM3 110 32	HG3B-1034-3B1		
700	JM3 111 32	HG3B-1010-3B1		
700	JM3 111	HG3B-1032-3B5		
1250	JM3 112 32	HG3B-1006-3B1		
2000	JM3 113			
2500	JM3 114			
5000	● JM3 115 32	HG3B-1002-3B1	MW-3603-21	
7100	JM3 116 32	HG3B-1013-3B1	MW-3605 21	
10000	JM3 117 32	HG3B-1005-3B1		
12500	JM3 118 32	HG3B-1016-3B1		
20000	JM3 119			
32000	JM3 120			
45000	JM3 121			
3	JM3 101			
14	JM3 102			
35	JM3 103			
50	JM3 104			
85	JM3 105			
140	JM3 106			
215	JM3 107			
250	JM3 108			
315	JM3 109			
500	JM3 110			
700	JM3 111			
1250	JM3 112	HG3C-1001-3C1		
2000	JM3 113			
2500	JM3 114			
5000	JM3 115	HG3C-1002-3C1		
7100	JM3 116	HG3C-1003-3C1		
10000	JM3 117			
12500	JM3 118			
20000	JM3 119			
32000	JM3 120			
45000	JM3 121			

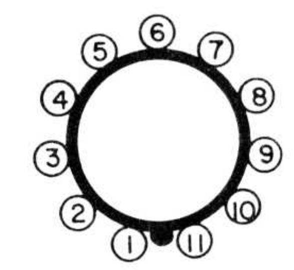
JM3
TERMINATION DIAGRAMS





Hook Solder

P&B	Fig. 31	Fig. 32
CLARE	Fig. 3A1	Fig. 3B1
ADLAKE	Fig. 311	Fig. 321
AUT. ELEC.	Fig. A3	



P&B	Fig. 33
CLARE	Fig. 3A3
ADLAKE	Fig. 313
AUT. ELEC.	Fig. B3