

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI 2SC2879** is a 12.5 V transistor designed primarily for SSB linear power amplifier applications up to 28 MHz.

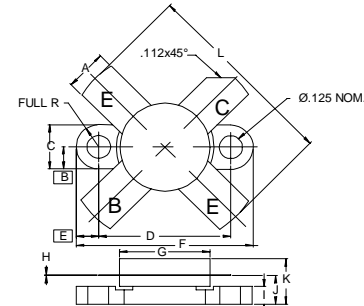
## FEATURES:

- $P_G = 13$  Typ. min. at 100 W/28 MHz
- $IMD_3 = -24$  dBc max. at 100 W<sub>(PEP)</sub>
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

$I_C$	25 A
$V_{CBO}$	45 V
$V_{CEO}$	18 V
$V_{EBO}$	4.0 V
$P_{DISS}$	250 W @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+175^\circ C$
$T_{STG}$	$-65^\circ C$ to $+175^\circ C$
$\theta_{JC}$	0.6 $^\circ C/W$

## PACKAGE STYLE .500 4L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.125 / 3.18	
C	.245 / 6.22	.255 / 6.48
D	.720 / 18.28	.730 / 18.54
E	.125 / 3.18	
F	.970 / 24.64	.980 / 24.89
G	.495 / 12.57	.505 / 12.83
H	.003 / 0.08	.007 / 0.18
I	.090 / 2.29	.110 / 2.79
J	.150 / 3.81	.175 / 4.45
K		.280 / 7.11
L	.980 / 24.89	1.050 / 26.67

## CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CES}$	$I_C = 100$ mA	45			V
$BV_{CEO}$	$I_C = 100$ mA	18			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 10$ A	10		150	---
$C_{OB}$	$V_{CB} = 12.5$ V $f = 1.0$ MHz		700		pF
$G_P$	$V_{CE} = 12.5$ V $I_{idle} = 100$ mA $f = 28$ MHz	13.0	15.2		dB
$\eta_c$	$P_{OUT} = 100$ W	35			%
$IMD_3$				-24	dBc
$Z_{IN}$	$V_{CC} = 12.5$ V $P_{OUT} = 100$ W $f = 28$ MHz	---	$1.45 - j0.95$	---	$\Omega$
$Z_{OUT}$	$V_{CC} = 12.5$ V $P_{OUT} = 100$ W $f = 28$ MHz	---	$1.45 - j1.0$	---	$\Omega$