NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

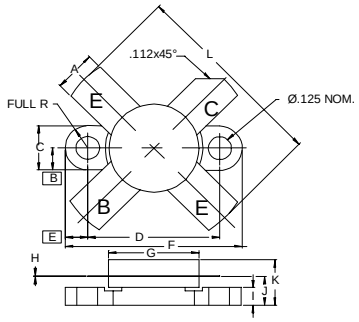
FEATURES:

- P_G = 13 Typ. min. at 100 W/28 MHz
- IMD_3 = -24 dBc max. at 100 W(PEP)
- ***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 °C
T_J	-65 °C to +175 °C
T_{STG}	-65 °C to +175 °C
θ_{JC}	0.6 °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	.7.30 / 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 °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
η_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	---	Ω
Z_{OUT}	V_{CC} = 12.5 V	P_{OUT} = 100 W	f = 28 MHz	---	1.45 – J1.0	---	Ω