NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MRF448** is Designed for

High Linearity Class AB HF Power Amplifier Applications up to 30 MHz.

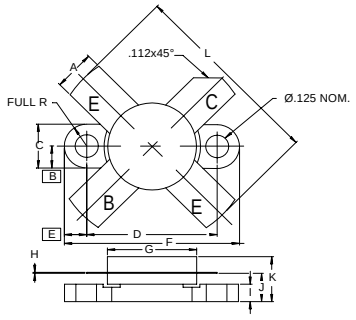
FEATURES:

- $\mathbf{P_G}$ = 14 dB Typical at 220 W/30 MHz
- $\mathbf{IMD_3}$ = -32 dBc Typ. at 220 W(PEP)
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

$\mathbf{I_C}$	16 A
$\mathbf{V_{CBO}}$	100 V
$\mathbf{V_{CEO}}$	50 V
$\mathbf{V_{EBO}}$	4.0 V
$\mathbf{P_{DISS}}$	290 W @ T_C = 25 °C
$\mathbf{T_J}$	-65 °C to +200 °C
$\mathbf{T_{STG}}$	-65 °C to +150 °C
$\mathbf{\theta_{JC}}$	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

ORDER CODE: ASI10866

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$\mathbf{BV_{CBO}}$	I_C = 100 mA	100			**V**
$\mathbf{BV_{CEO}}$	I_C = 200 mA	50			**V**
$\mathbf{BV_{EBO}}$	I_E = 10 mA	4.0			**V**
$\mathbf{I_{CEO}}$	V_{CE} = 30 V			5	**mA**
$\mathbf{I_{CES}}$	V_{CE} = 50 V			10	**mA**
$\mathbf{h_{FE}}$	V_{CE} = 10 V I_C = 5.0 A	10			**---**
$\mathbf{C_{ob}}$	V_{CB} = 50 V f = 1.0 MHz		350	450	**pF**
$\mathbf{G_P}$	V_{CE} = 50 V I_{CQ} =250 mA P_{OUT} = 250 W(CW)	12			**dB**
$\mathbf{\eta_C}$			65		**%**
IMD	V_{CE} = 50 V I_{CQ} =250 mA P_{OUT} = 250 W(PEP)		-33	-30	**dB**
$\mathbf{\eta_C}$			45		**%**