

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MRF448** is Designed for High Linearity Class AB HF Power Amplifier Applications up to 30 MHz.

FEATURES:

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

MAXIMUM RATINGS

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

ORDER CODE: ASI10866

CHARACTERISTICS $T_C = 25$ °C

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