NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MRF406** is Designed for 12.5 V 30 MHz Power Amplifier Applications.

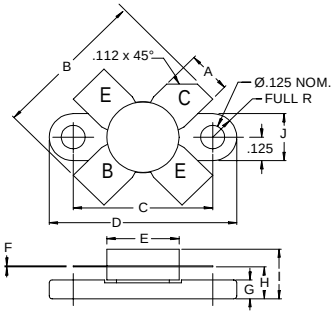
FEATURES INCLUDE:

- Common Emitter
- Output Power = 20 W (PEP)

MAXIMUM RATINGS

I_C	4.0 A
V_{CE}	20 V
V_{CB}	40 V
P_{DISS}	80 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	2.2 °C/W

PACKAGE STYLE .380" 4L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.785 / 19.94	
C	.720 / 18.29	.730 / 18.54
D	.970 / 24.64	.980 / 24.89
E		.385 / 9.78
F	.004 / 0.10	.006 / 0.15
G	.085 / 2.16	.105 / 2.67
H	.160 / 4.06	.180 / 4.57
I		.280 / 7.11
J	.240 / 6.10	.255 / 6.48

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	I_C = 50 mA	40			V
BV_{CBO}	I_C = 50 mA	40			V
BV_{CEO}	I_C = 50 mA	20			V
BV_{EBO}	I_E = 1.0 mA	4.0			V
I_{CES}	V_{CE} = 12.5 V			5.0	mA
h_{FE}	I_C = 1.0 A V_{CE} = 5.0 V	10	35		---
C_{ob}	V_{CB} = 12.5 V f = 1.0 MHz			200	pF
P_{out}	V_{CE} = 12.5 V f = 30 MHz	20			W(PEP)
G_{PE} η IMD	V_{CC} = 12.5 V $I_C \leq$ 1.75 A P_{out} = 20 W (PEP) I_{cq} = 25 mA f = 30, 30.001 MHz	12 45 -30			dB % dB
ψ	V_{CC} = 12.5 V $I_C \leq$ 1.75 A P_{out} = 20 W (PEP) I_{cq} = 25 mA f = 30, 30.001 MHz	>30:1 ALL PHASE ANGLES			