

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

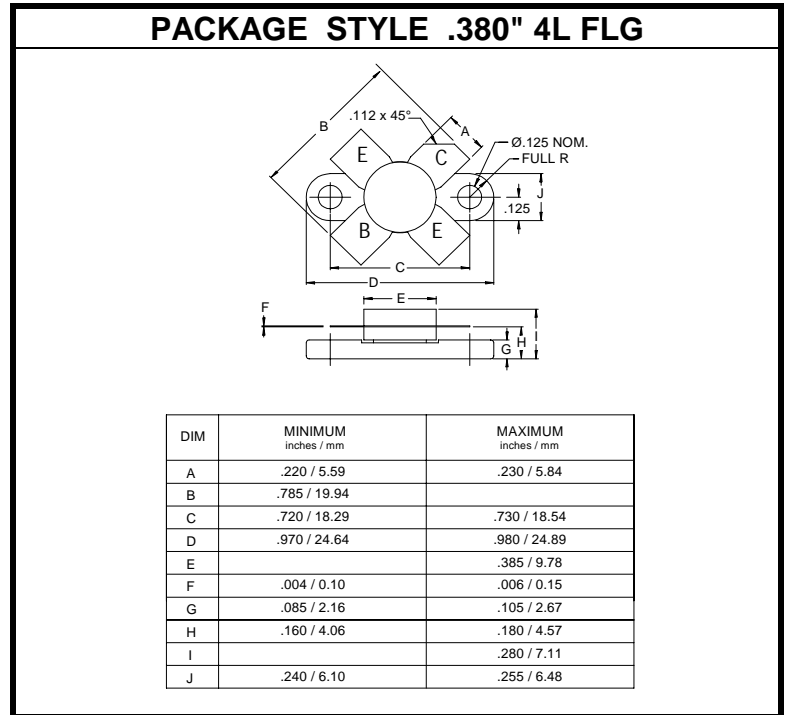
The **MRF406** is Designed for 12.5 V 30 MHz Power Amplifier Applications.

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


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}	V _{CC} = 12.5 V I _C ≤ 1.75 A P _{out} = 20 W (PEP)	12			dB
η	I _{cq} = 25 mA f = 30, 30.001 MHz	45			%
IMD		-30			dB
ψ	V _{CC} = 12.5 V I _C ≤ 1.75 A P _{out} = 20 W (PEP)	>30:1 ALL PHASE ANGLES			
	I _{cq} = 25 mA f = 30, 30.001 MHz				