

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MRF616** is Designed for Common Emitter Class C Amplifier Applications in 12.5 Volt UHF Mobile Radios.

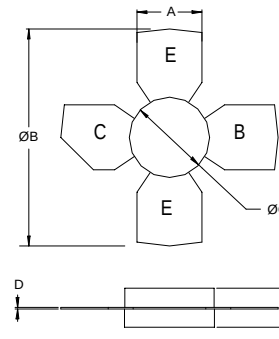
FEATURES INCLUDE:

- High Gain, **11 DB Typical**
- Gold Metallization
- Emitter Ballasting

MAXIMUM RATINGS

I_C	250 mA
V_{CBO}	36 V
P_{DISS}	5.0 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
θ_{JC}	35°C/W

PACKAGE STYLE .280" 4L PILL



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B		1.055 / 26.80
C	.275 / 6.99	.285 / 7.24
D	.004 / 0.10	.006 / 0.15
E	.050 / 1.27	.060 / 1.52
F	.118 / 3.00	.130 / 3.30

CHARACTERISTICS $T_C = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 5.0\text{ mA}$	36			V
BV_{CEO}	$I_C = 50\text{ mA}$	16			V
BV_{EBO}	$I_E = 1.0\text{ mA}$	4.0			V
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 150\text{ mA}$	20			---
C_{OB}	$V_{CB} = 12.5\text{ V}$ $f = 1.0\text{ MHz}$		3.5		pF
P_G η_C	$V_{CE} = 12.5\text{ V}$ $P_{OUT} = 1.0\text{ W}$ $f = 470\text{ MHz}$	10	11 65		dB %