

NPN RF POWER TRANSISTOR

DESCRIPTION:

The **MRF5174** is a Common Emitter Device Designed for Class A, AB and C Amplifier Applications in the 225 to 400 MHz Band.

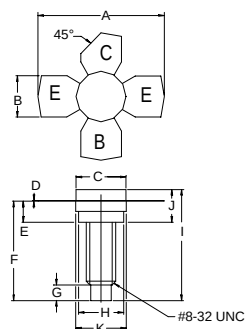
FEATURES INCLUDE:

- High Gain
- Gold Metallization
- Emitter Ballasting

MAXIMUM RATINGS

I_C	0.5 A
V_{CBO}	40 V
P_{DISS}	8.75 W @ $T_C = 25^\circ\text{C}$
T_J	-55°C to $+200^\circ\text{C}$
T_{STG}	-55°C to $+200^\circ\text{C}$
θ_{JC}	20°C/W

PACKAGE STYLE .280 4L STUD



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	1.010 / 25.65	1.055 / 26.80
B	.220 / 5.59	.230 / 5.84
C	.270 / 6.86	.285 / 7.24
D	.003 / 0.08	.007 / 0.18
E	.117 / 2.97	.137 / 3.48
F	.572 / 14.53	
G	.130 / 3.30	
H	.245 / 6.22	.255 / 6.48
I	.640 / 16.26	
J	.175 / 4.45	.217 / 5.51
K	.275 / 6.99	.285 / 7.24

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 1.0\text{ mA}$	40			V
BV_{CEO}	$I_C = 1.0\text{ mA}$	28			V
BV_{EBO}	$I_E = 1.0\text{ mA}$	3.5			V
I_{CBO}	$V_{CB} = 28\text{ V}$			500	μA
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 100\text{ mA}$	20		120	---
C_{OB}	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$			5.0	pF
P_G	$V_{CE} = 28\text{ V}$ $P_{OUT} = 2.0\text{ W}$ $f = 400\text{ MHz}$	12	13		dB
η_C		50			%