

NPN RF POWER TRANSISTOR

DESCRIPTION:

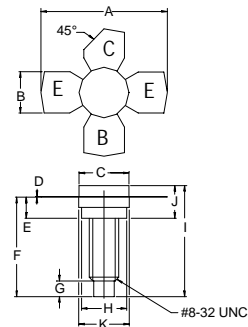
The **MRF5174** is a Common Emitter Device Designed for Class A, AB and C Amplifier Applications in the 225 to 400 MHz Band.

FEATURES INCLUDE:

- High Gain
- Gold Metallization
- Emitter Ballasting

MAXIMUM RATINGS

| | |
|-------------------------|---------------------------------|
| I_C | 0.5 A |
| V_{CB0} | 40 V |
| P_{DISS} | 8.75 W @ T _C = 25 °C |
| T_J | -55 °C to +200 °C |
| T_{STG} | -55 °C to +200 °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 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|---|---------|---------|---------|-------|
| BV_{CB0} | I _C = 1.0 mA | 40 | | | V |
| BV_{CEO} | I _C = 1.0 mA | 28 | | | V |
| BV_{EBO} | I _E = 1.0 mA | 3.5 | | | V |
| I_{CB0} | V _{CB} = 28 V | | | 500 | μA |
| h_{FE} | V _{CE} = 5.0 V I _C = 100 mA | 20 | | 120 | --- |
| C_{OB} | V _{CB} = 28 V f = 1.0 MHz | | | 5.0 | pF |
| P_G | V _{CE} = 28 V P _{OUT} = 2.0 W f = 400 MHz | 12 | 13 | | dB |
| η_C | | 50 | | | % |