

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

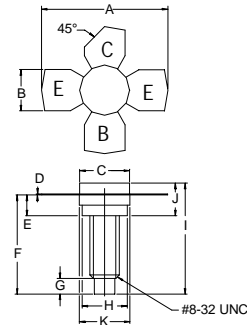
The **MRF323** is Designed for Wide Band Large-Signal Driver and Predriver Applications in the 200 to 500 MHz Range.

**FEATURES INCLUDE:**

- Gold Metalization
- 30:1 VSWR

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	2.2 A (CONT) 3.0 A (PEAK)
<b>V<sub>CB</sub></b>	60 V
<b>P<sub>DISS</sub></b>	55 W @ T <sub>C</sub> = 25 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>θ<sub>JC</sub></b>	3.2 °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<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 20 mA	60			<b>V</b>
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 20 mA	60			<b>V</b>
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 20 mA	33			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 2.0 mA	4.0			<b>V</b>
<b>I<sub>CBO</sub></b>	V <sub>CB</sub> = 30 V			2.0	<b>mA</b>
<b>h<sub>FE</sub></b>	I <sub>C</sub> = 1.0 A      V <sub>CE</sub> = 5.0 V	20		80	<b>---</b>
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V      f = 1.0 MHz		20	24	<b>pF</b>
<b>G<sub>PE</sub></b>	V <sub>CC</sub> = 28 V      P <sub>out</sub> = 20 W      f = 400 MHz	10	11		<b>dB</b>
<b>η</b>		50	60		<b>%</b>
<b>ψ</b>	V <sub>CC</sub> = 28 V      P <sub>out</sub> = 20 W VSWR = 30:1 ALL PHASE ANGLES      f = 400 MHz	NO DEGRADATION IN OUTPUT POWER			