

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.

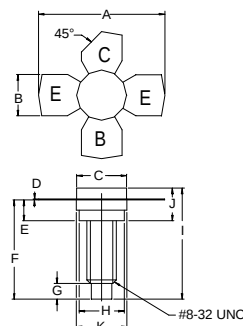
FEATURES INCLUDE:

- Gold Metalization
- 30:1 VSWR

MAXIMUM RATINGS

I_C	2.2 A (CONT) 3.0 A (PEAK)
V_{CB}	60 V
P_{DISS}	55 W @ $T_C = 25^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	3.2 $^\circ\text{C/W}$

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}	$I_C = 20\text{ mA}$	60			V
BV_{CES}	$I_C = 20\text{ mA}$	60			V
BV_{CEO}	$I_C = 20\text{ mA}$	33			V
BV_{EBO}	$I_E = 2.0\text{ mA}$	4.0			V
I_{CBO}	$V_{CB} = 30\text{ V}$			2.0	mA
h_{FE}	$I_C = 1.0\text{ A}$ $V_{CE} = 5.0\text{ V}$	20		80	---
C_{ob}	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$		20	24	pF
G_{PE} η	$V_{CC} = 28\text{ V}$ $P_{out} = 20\text{ W}$ $f = 400\text{ MHz}$	10 50	11 60		dB %
ψ	$V_{CC} = 28\text{ V}$ $P_{out} = 20\text{ W}$ $f = 400\text{ MHz}$ VSWR = 30:1 ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			