

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MRF314A** is Designed for Class C Power Amplifier Applications up to 200 MHz.

FEATURES:

- $P_G = 10$ dB min. at 30 W/ 150 MHz
- Withstands **30:1** Load VSWR
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	4.0 A
V_{CBO}	65 V
V_{CEO}	35 V
V_{EBO}	4.0 V
P_{DISS}	60 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	2.9 $^\circ\text{C}/\text{W}$

PACKAGE STYLE .380 4L STUD

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.980 / 24.89	
C	.370 / 9.40	.385 / 9.78
D	.004 / 0.10	.007 / 0.18
E	.320 / 8.13	.330 / 8.38
F	.100 / 2.54	.130 / 3.30
G	.450 / 11.43	.490 / 12.45
H	.090 / 2.29	.100 / 2.54
I	.155 / 3.94	.175 / 4.45
J		.750 / 19.05

ORDER CODE: ASI10770

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 200$ mA	35			V
BV_{CES}	$I_C = 200$ mA	65			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CBO}	$V_E = 28$ V			2.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 200$ mA	5		---	---
C_{OB}	$V_{CB} = 28$ V $f = 1.0$ MHz			50	pF
P_G	$V_{CC} = 28$ V $P_{OUT} = 30$ W $f = 150$ MHz	10	13.5		dB
η_c		50	60		%
ψ		30:1 minimum without degraation in output power			