

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **MRF314** 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**

$I_C$	3.4 A
$V_{CB0}$	65 V
$V_{CEO}$	35 V
$V_{EBO}$	4.0 V
$P_{DISS}$	82 W @ $T_C = 25^\circ\text{C}$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	2.13 °C/W

**PACKAGE STYLE .380 4L FLG**

	MINIMUM DIMENSIONS	MAXIMUM DIMENSIONS
A	208±0.10	210±0.08
B	385±0.04	
C	158±0.08	158±0.04
D	370±0.04	368±0.02
E	385±0.10	385±0.10
F	304±0.10	304±0.10
G	385±0.05	375±0.07
H	140±0.10	135±0.10
I		280±0.10
J	240±0.10	235±0.08

**ORDER CODE: ASI10872**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 30$ mA	35			V
$BV_{CES}$	$I_C = 30$ mA	65			V
$BV_{EBO}$	$I_E = 3.0$ mA	4.0			V
$I_{CBO}$	$V_E = 30$ V			3.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.5$ A	20		80	---
$C_{OB}$	$V_{CB} = 30$ V $f = 1.0$ MHz		30	40	pF
$P_G$	$V_{CC} = 28$ V $P_{OUT} = 30$ W $f = 150$ MHz	10	13.5		dB
$\eta_c$		50			%
$\psi$		30:1 all phase angles, no degradation in output.			