

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **MRA1417-6H** is a Common Base Device Designed for Class C Amplifier Applications in L-Band FM Microwave Links.

**FEATURES INCLUDE:**

- Gold Metallization
- Emitter Ballasting
- Input Matching

**MAXIMUM RATINGS**

$I_C$	1.0 A
$V_{CBO}$	50 V
$P_{DISS}$	19 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$\theta_{JC}$	9.0 $^\circ\text{C}/\text{W}$

**PACKAGE STYLE .250 2L FLG (B)**

1 = COLLECTOR    2 = BASE  
3 = EMITTER

DIM	MILLIMETER	TOL	INCHES	TOL
A	9.40	.61	.370	.024
B	6.60	.18	.250	.005
C	9.40	.61	.370	.024
D	20.32	.25	.800	.010
E	14.22	.13	.560	.005
F	6.35	.13	.250	.005
G	0.10	.05	.004	.002
H	2.54	.13	.100	.005
I	1.27	.13	.050	.005
J	3.30 DIA	.13	.130 DIA	.005
K	3.43	.13	.135	.005
L	2.79	.13	.110	.005
M	1.52	.13	.060	.005

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 25\text{ mA}$	50			V
$BV_{CES}$	$I_C = 25\text{ mA}$	55			V
$BV_{EBO}$	$I_E = 3.0\text{ mA}$	3.5			V
$h_{FE}$	$V_{CE} = 5.0\text{ V}$ $I_C = 100\text{ mA}$	20		100	---
$C_{ob}$	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$		6.5		pF
$P_G$ $\eta_C$	$V_{CE} = 28\text{ V}$ $P_{OUT} = 6.0\text{ W}$ $f = 1400 - 1700\text{ MHz}$	7.2	7.5 40		dB %