

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI MRA1417-2** is a Common Base Device Designed for Class C Power Amplifier Applications up to 1.7 GHz.

FEATURES INCLUDE:

- Gold Metallization
- Emitter Ballasting
- Input Matching

MAXIMUM RATINGS

I_C	0.5 A
V_{CB0}	50 V
P_{DISS}	12 W @ $T_C = 25^\circ\text{C}$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	15 °C/W

PACKAGE STYLE 250 2L FLG (C)

DIM	MILLIMETER	TOL	INCHES	TOL
A	16.51	.25	.650	.010
B	6.35	.13	.250	.005
C	1.52	.13	.060	.005
D	3.17 DIA	.13	.125 DIA	.005
E	18.92	.05	.745	.002
F	45°	5°	45°	5°
G	2.16	.13	.085	.005
H	14.22	.05	.560	.002
I	1.52	.13	.060	.005
J	7.62	.13	.300	.005
K	0.13	.02	.005	.001
M	4.44	REF	.175	REF
N	1.27 x 45°	.13	.050 x 45°	.005

1 = COLLECTOR 2 = BASE
3 = EMITTER

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 20\text{ mA}$	50			V
BV_{EBO}	$I_E = 0.25\text{ mA}$	3.5			V
I_{CBO}	$V_{CB} = 28\text{ V}$			0.5	mA
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 100\text{ mA}$	10		100	---
C_{ob}	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$			4.5	pF
P_G	$V_{CE} = 28\text{ V}$ $P_{OUT} = 2.0\text{ W}$ $f = 1700\text{ MHz}$	8.0			dB
η_c		45			%