

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MRA0610-18A** is Designed for Class C, Common Base Wideband Large Signal Amplifier Applications From 600 MHz to 1.0 GHz, With Internal Compensating Matching Network and Diffused Ballast Resistors.

MAXIMUM RATINGS

I_C	2.5 A (CONT)
V_{CES}	50 V
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	4.0 °C/W

PACKAGE STYLE MRA .25				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	8.00	8.38	0.351	0.330
B	0.08	0.15	0.003	0.006
C	1.98	2.34	0.078	0.092
D	1.40	1.65	0.055	0.065
E	4.32	5.08	0.170	0.200
F	18.77	19.03	0.739	0.749
G	5.33	5.84	0.210	0.230
H	6.17	6.43	0.243	0.253
J	7.74	8.64	0.210	0.240
K	14.10	14.35	0.555	0.565
L	3.17	3.43	0.125	0.135

1 = Collector 2 = Emitter
3 = Base

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 100\text{ mA}$	50			V
BV_{EBO}	$I_E = 1.25\text{ mA}$	3.5			V
I_{CBO}	$V_{CB} = 28\text{ V}$			2.5	mA
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 500\text{ mA}$	10		100	---
C_{ob}	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$		14		pF
G_{PB}	$V_{CE} = 28\text{ V}$ $P_{out} = 18\text{ W}$ $f = 600\text{ MHz \& } 1.0\text{ GHz}$	7.8			dB
η_C		50			%