

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MRF838A** is a Common Emitter Device Designed for Class A, B and C Amplifier Applications up to 1.0 GHz.

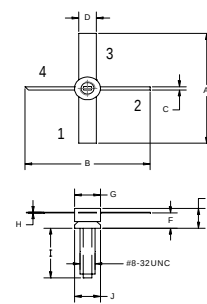
FEATURES INCLUDE:

- Gold Metallization
- Emitter Ballasting
- High Gain

MAXIMUM RATINGS

I_C	600 mA
V_{CBO}	36 V
P_{DISS}	8.75 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+200^\circ C$
θ_{JC}	$20^\circ C/W$

PACKAGE STYLE .205 4L STUD



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.976 / 24.800	1.000 / 25.4000
B	.976 / 24.800	1.000 / 25.4000
C	.028 / 0.700	.031 / 0.800
D	.138 / 3.500	
E	.161 / 4.100	.196 / 5.000
F	.098 / 2.500	.110 / 2.800
G	.200 / 5.100	.208 / 5.300
H	.004 / 0.100	.006 / 0.150
I	.425 / 10.800	.465 / 11.800
J	.200 / 5.100	2.05 / 5.200

1 & 3 = EMITTER 2 = BASE
4 = COLLECTOR

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 10 \text{ mA}$	36			V
BV_{CEO}	$I_C = 10 \text{ mA}$	18			V
BV_{EBO}	$I_E = 1.0 \text{ mA}$	4.0			V
h_{FE}	$V_{CE} = 5.0 \text{ V}$ $I_C = 150 \text{ mA}$	20			---
C_{OB}	$V_{CB} = 12.5 \text{ V}$ $f = 1.0 \text{ MHz}$			7.5	pF
P_G η_c	$V_{CE} = 12.5 \text{ V}$ $P_{OUT} = 1.0 \text{ W}$ $f = 870 \text{ MHz}$	6.5 50	7.5		dB %