



MRF390

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI MRF390** is a Common Emitter Device Designed for Class A, AB and C Amplifier Applications in the 100 - 500 MHz Military Communications Band.

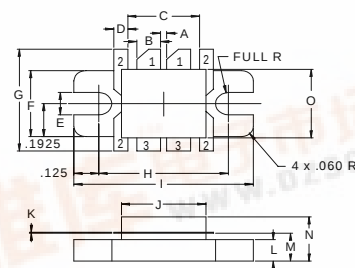
FEATURES INCLUDE:

- Gold Metalization
- Emitter Ballasting
- Input Matching

MAXIMUM RATINGS

I_C	7.0 A
V_{CB}	60 V
P_{DISS}	140 W @ $T_C = 25^\circ\text{C}$
T_J	-55°C to $+200^\circ\text{C}$
T_{STG}	-55°C to $+200^\circ\text{C}$
θ_{JC}	1.25 $^\circ\text{C/W}$

PACKAGE STYLE .400 8L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.030 / 0.76	
B	.115 / 2.92	.125 / 3.18
C	.360 / 9.14	
D	.065 / 1.65	.075 / 1.91
E	.130 / 3.30	
F	.380 / 9.65	.390 / 9.91
G	.735 / 18.67	.765 / 19.43
H	.645 / 16.38	.655 / 16.64
I	.895 / 22.73	.905 / 22.99
J	.420 / 10.67	.430 / 10.92
K	.003 / 0.08	.007 / 0.18
L	.120 / 3.05	.130 / 3.30
M	.159 / 4.04	.175 / 4.45
N	.280 / 7.11	
O	.395 / 10.03	.405 / 10.29

1 = COLLECTOR 2 = EMITTER
3 = BASE

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 100\text{ mA}$	30			V
BV_{CES}	$I_C = 100\text{ mA}$	60			V
BV_{EBO}	$I_E = 10\text{ mA}$	4.0			V
C_{ob}	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$		52		pF
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 1.0\text{ A}$	10			---
P_g η_c	$V_{CE} = 28\text{ V}$ $P_{out} = 50\text{ W}$ $f = 500\text{ MHz}$	7.5	8.5 55		dB %