

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI MRF648** is Designed for 12.5 V UHF large signal amplifier applications up to 512 MHz.

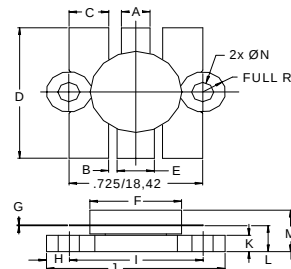
FEATURES:

- Internal Input Matching Network
- $P_G = 4.4$ dB at 60 W/470 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	11 A
V_{CBO}	36 V
V_{CEO}	16 V
V_{EBO}	4.0 V
P_{DISS}	175 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	1.0 $^\circ\text{C/W}$

PACKAGE STYLE .500 6L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.150 / 3.43	.160 / 4.06
B	.045 / 1.14	
C	.210 / 5.33	.220 / 5.59
D	.835 / 21.21	.865 / 21.97
E	.200 / 5.08	.210 / 5.33
F	.490 / 12.45	.510 / 12.95
G	.003 / 0.08	.007 / 0.18
H	.125 / 3.18	
I	.725 / 18.42	
J	.970 / 24.64	.980 / 24.89
K	.090 / 2.29	.105 / 2.67
L	.150 / 3.81	.170 / 4.32
M	.285 / 7.24	
N	.120 / 3.05	.135 / 3.43

Common Emitter

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 50$ mA	36			V
BV_{CEO}	$I_C = 50$ mA	16			
BV_{EBO}	$I_E = 5.0$ Ma	4.0			V
I_{CES}	$V_{CE} = 15$ V			15	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 6.0$ A	20		150	---
C_{OB}	$V_{CB} = 12.5$ V $f = 1.0$ MHz		130	150	pF
P_G η_c	$V_{CE} = 12.5$ V $P_{OUT} = 60$ W $f = 470$ MHz	4.4 55	5.0 65		dB %