NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI MSC1300M** is a high power Class C, common Base transistor, Designed for IFF/DME/TACAN Applications.

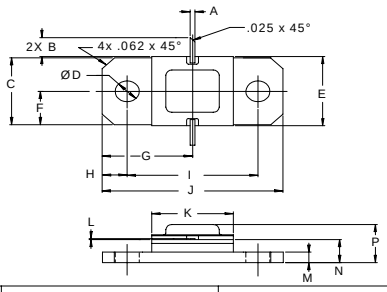
FEATURES:

- Internal Input/Output Matching Networks
- P_G = 6.3 dB at 300 W/1090 MHz
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

I_C	20 A
V_{CC}	55 V
P_{DISS}	625 W @ T_C = 25 °C
T_J	-65 °C to +250 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	0.20 °C/W

PACKAGE STYLE .400 2NL FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.020 / 0.51	.030 / 0.76
B	.100 / 2.54	
C	.376 / 9.55	.396 / 10.06
D	.110 / 2.79	.130 / 3.30
E	.395 / 10.03	.407 / 10.34
F	.193 / 4.90	
G	.450 / 11.43	
H	.125 / 3.18	
I	.640 / 16.26	.660 / 16.76
J	.890 / 22.61	.910 / 23.11
K	.395 / 10.03	.415 / 10.54
L	.004 / 0.10	.007 / 0.18
M	.052 / 1.32	.072 / 1.83
N	.118 / 3.00	.131 / 3.33
P		.230 / 5.84

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I_C = 10 mA			65			**v**
BV_{CER}	I_C = 25 mA	R_{BE} = 10 Ω		65			**V**
BV_{EBO}	I_E = 1.0 mA			3.5			**V**
I_{CES}	V_{CE} = 50 V					25	**mA**
h_{FE}	V_{CE} = 5.0 V	I_C = 1.0 A		15		120	**---**
G_P η_C	V_{CC} = 50 V	P_{OUT} = 300 W	f = 1090 MHz	6.3 35	6.7 42		**dB** **%**

Pulse Width = 10 µsec, Duty Cycle 10 %