



# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI MSC72143** is Designed for Class C, DME/TACAN Applications up to 1150 MHz.

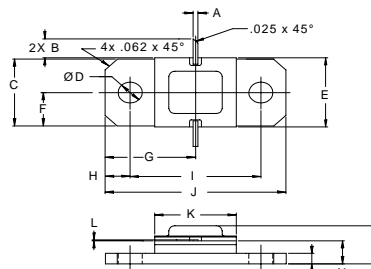
## FEATURES:

- Replacement for **MSC81250M Hi-Rel**
- **168** Hour Burn-In
- Internal Input/Output Matching Networks
- $P_G = 6.2$  dB at 250 W/1150 MHz
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

$I_C$	17.8 A
$V_{CC}$	55 V
$P_{DISS}$	600 W @ $T_C \leq 80^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+250^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$\theta_{JC}$	0.2 $^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 10$ mA	65			V
$BV_{CER}$	$I_C = 25$ mA $R_{BE} = 10 \Omega$	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	---
$P_G$	$V_{CC} = 50$ V $P_{OUT} = 250$ W $f = 1025 - 1150$ MHz	6.2			dB
$\eta_c$		40			%