

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI MSC1090M** is a common base Class C transistor, designed for Avionics, DME Applications from 1025 to 1150 MHz.

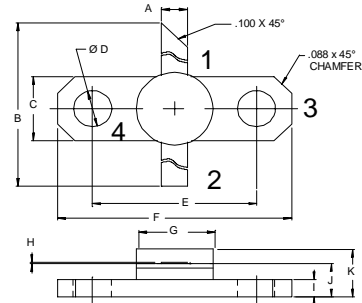
## FEATURES:

- Internal Input Matching Network
- $P_G = 8.4$  dB at 90 W/1150 MHz
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

$I_C$	250 mA
$V_{CC}$	50 V
$P_{DISS}$	290 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	0.60 °C/W

## PACKAGE STYLE .250 2L FLG(B)



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.095 / 2.41	.105 / 2.67
B	1.050 / 26.67	
C	.245 / 6.22	.255 / 6.48
D	.120 / 3.05	.140 / 3.56
E	.552 / 14.02	.572 / 14.53
F	.790 / 20.07	.810 / 20.57
G		.285 / 7.24
H	.003 / 0.08	.007 / 0.18
I	.052 / 1.32	.072 / 1.83
J	.120 / 3.05	.130 / 3.30
K		.210 / 5.33

1 = COLLECTOR 2 = EMITTER 3 & 4 = BASE

## CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 1$ mA	65			V
$BV_{CER}$	$I_C = 5$ mA $R_{BE} = 10$ Ω	65			V
$BV_{EBO}$	$I_E = 1$ mA	3.5			V
$I_{CES}$	$V_{CE} = 50$ V			6.3	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 100$ mA	5			---
$P_G$	$V_{CC} = 50$ V $P_{OUT} = 90$ W $f = 1025 - 1150$ MHz	8.4			dB
$\eta_c$	$P_{IN} = 13$ W	35			%