

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

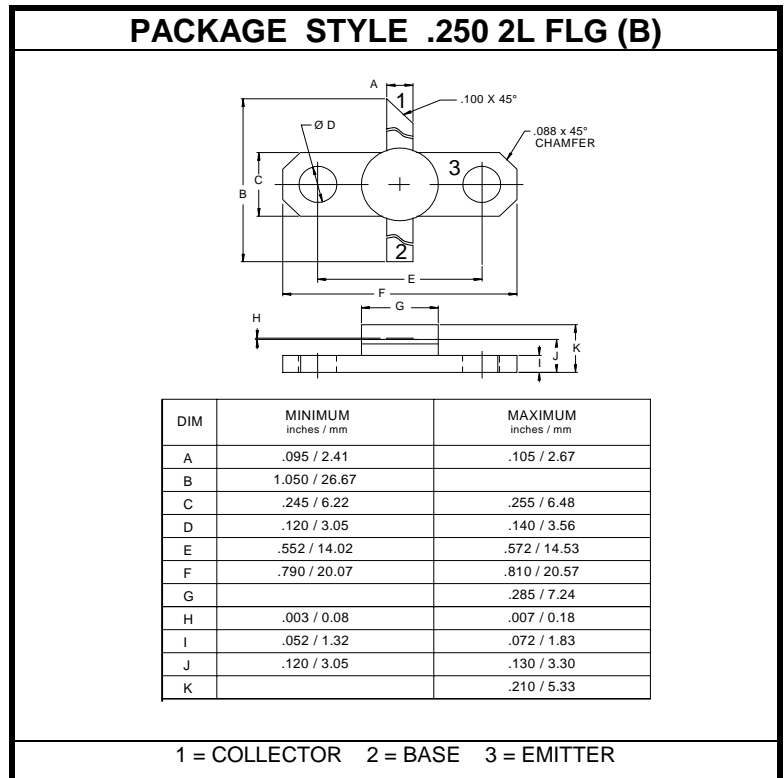
The **ASI MSC3000** is Designed for general purpose Amplifier Applications up to 3500 MHz.

FEATURES:

- $P_{OUT} = 5.0 \text{ W}$ Typ. at 3 GHz
- **Common Base** Configuration
- **Omnigold™** Metallization System

MAXIMUM RATINGS

I_C	100 mA
V_{CC}	30 V
P_{DISS}	2.5 W @ $T_C \leq 85 \text{ }^\circ\text{C}$
T_J	-65 $^\circ\text{C}$ to +200 $^\circ\text{C}$
T_{STG}	-65 $^\circ\text{C}$ to +200 $^\circ\text{C}$
θ_{JC}	45 $^\circ\text{C}/\text{W}$


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CER}	$I_C = 5.0 \text{ mA}$ $R_{BE} = 10\Omega$	50			V
BV_{CBO}	$I_C = 1.0 \text{ mA}$	50			V
BV_{EBO}	$I_E = 1.0 \text{ mA}$	3.5			V
I_{CBO}	$V_{CB} = 28 \text{ V}$			250	μA
h_{FE}	$V_{CE} = 5.0 \text{ V}$ $I_C = 500 \text{ mA}$	20		120	---
C_{OB}	$V_{CB} = 28 \text{ V}$ $f = 1.0 \text{ MHz}$			2.5	pF
P_G	$V_{CC} = 28 \text{ V}$ $P_{OUT} = 0.5 \text{ W}$ $f = 3.0 \text{ GHz}$	7.0			dB
η_c		25			%