

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

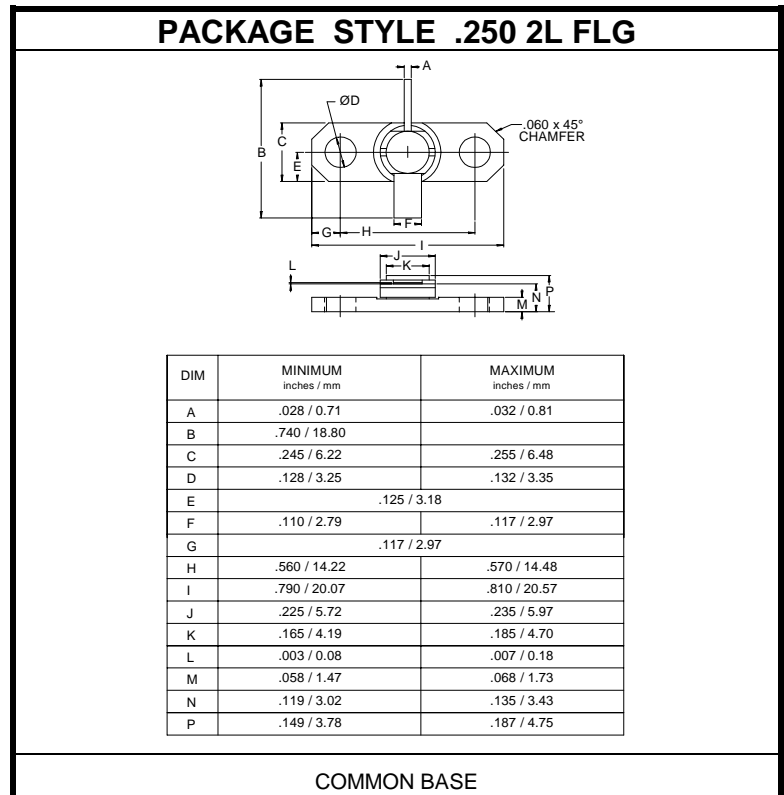
The **ASI MSC1020** is Designed for General Purpose Class C Power Amplifier Applications up to 1.2 GHz.

**FEATURES:**

- $P_G = 10$  dB min. at 20 W/ 1.0 GHz
- Hermetic Microstrip Package
- **Omnigold™** Metalization System
- Emitter Ballasted

**MAXIMUM RATINGS**

$I_C$	1.5 A
$V_{CC}$	35 V
$P_{DISS}$	35 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	5.0 °C/W


**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 5.0$ mA	45			V
$BV_{CER}$	$I_C = 15$ mA $R_{BE} = 10$ $\Omega$	45			V
$BV_{EBO}$	$I_E = 1.0$ mA	3.5			V
$I_{CBO}$	$V_{CB} = 28$ V			5.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.0$ A	15		120	---
$C_{ob}$	$V_{CB} = 28$ V $f = 1.0$ MHz			19	pF
$P_G$	$V_{CC} = 28$ V $P_{OUT} = 20$ W $f = 1.0$ GHz	10	10.2		dB
$\eta_c$	$P_{IN} = 2.0$ W	55	58		%