

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

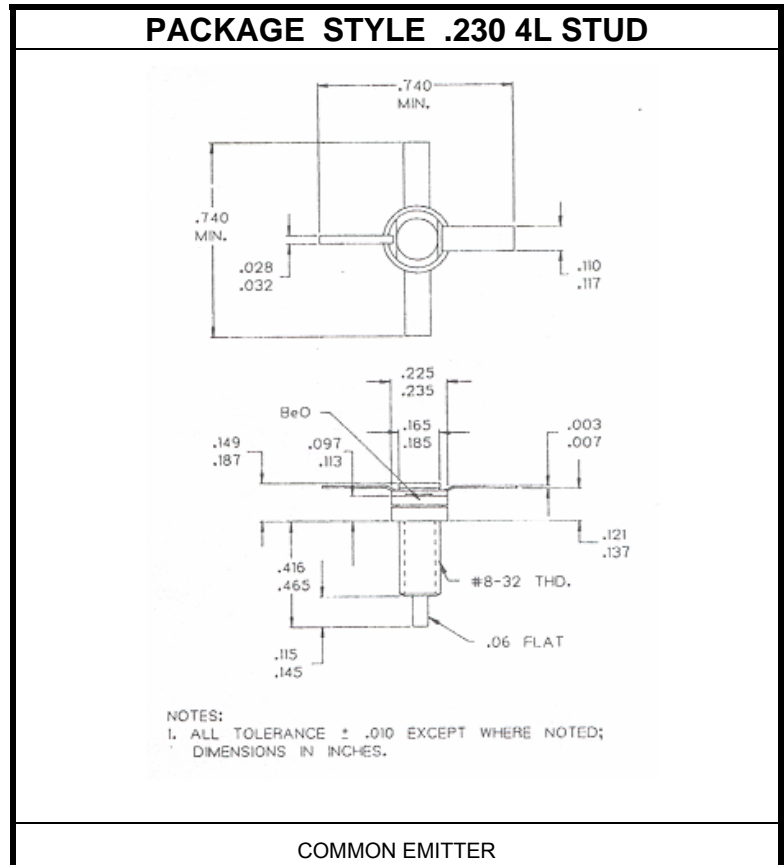
The **ASI MSC81090** is Designed for General Purpose Class A Power Amplifier Applications from 0.4 - 1.2 GHz.

**FEATURES:**

- $P_G = 10$  dB min. at 2.0 W/ 1.0 GHz
- Hermetically sealed Package
- **Omnigold™** Metalization System
- Emitter Ballasted

**MAXIMUM RATINGS**

$I_C$	200 A
$V_{CC}$	35 V
$P_{DISS}$	6.25 W @ $T_C \leq 75^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+200^\circ C$
$\theta_{JC}$	20 $^\circ C/W$


**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 1.0$ mA			45			V
$BV_{CER}$	$I_C = 5.0$ mA	$R_{BE} = 10 \Omega$		45			V
$BV_{EBO}$	$I_E = 1.0$ mA			3.5			V
$I_{CBO}$	$V_{CB} = 28$ V					0.5	mA
$h_{FE}$	$V_{CE} = 5.0$ V	$I_C = 100$ mA		15		120	---
$C_{ob}$	$V_{CB} = 18$ V	$f = 1.0$ MHz				3.2	pF
$P_{OUT}$	$V_{CE} = 18$ V	$P_{IN} = 0.2$ W	$f = 1.0$ GHz	2.0	2.2		W
$\eta_C$				50	55		%
$G_P$				10	10.4		dB