

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

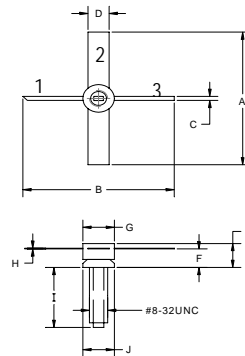
The **ASI MRF890** is Designed for UHF Class A Amplifier Applications in Cellular Base Station Equipment.

**FEATURES:**

- $P_g = 9.0$  dB min. @ 900 MHz
- $P_{1dB} = 2.0$  Watts min. at 900 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	0.5 A
$V_{CBO}$	55 V
$V_{CER}$	30 V
$V_{EBO}$	4.0 V
$P_{DISS}$	7.0 W @ $T_C = 25^\circ C$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	25 °C/W

**PACKAGE STYLE .205 4L STUD**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.976 / 24.800	1.000 / 25.4000
B	.976 / 24.800	1.000 / 25.4000
C	.028 / 0.700	.031 / 0.800
D	.138 / 3.500	
E	.161 / 4.100	.196 / 5.000
F	.098 / 2.500	.110 / 2.800
G	.200 / 5.100	.208 / 5.300
H	.004 / 0.100	.006 / 0.150
I	.425 / 10.800	.465 / 11.800
J	.200 / 5.100	2.05 / 5.200

1 = Collector 2 = Emitter 3 = Base

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 5.0$ mA	30			V
$BV_{CES}$	$I_C = 5.0$ mA	55			V
$BV_{EBO}$	$I_E = 5.0$ mA	4.0			V
$I_{CBO}$	$V_{CB} = 30$ V			500	$\mu A$
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 100$ mA	10		100	---
$C_{OB}$	$V_{CB} = 30$ V $f = 1.0$ MHz			2.0	pF
$P_g$	$V_{CC} = 24$ V $P_{OUT} = 2.0$ V $f = 900$ MHz	9.0			dB
$\eta_c$		55			%