

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI MRF629** is Designed for UHF large signal, FM Land Mobile Applications up to 470 MHz.

**FEATURES:**

- Grounded Emitter
- $P_G = 8.0$  dB at 2.0 W/470 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	400 mA
$V_{CEO}$	16 V
$V_{CES}$	36 V
$V_{EBO}$	4.0 V
$P_{DISS}$	5.0 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$\theta_{JC}$	35 $^\circ\text{C/W}$

**PACKAGE STYLE TO 205AD**

DIM	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	9.02	9.29	0.355	0.366
B	8.01	8.50	0.315	0.335
C	4.20	4.57	0.165	0.180
D	0.44	0.53	0.017	0.021
E	0.44	0.88	0.017	0.035
F	0.41	0.48	0.016	0.019
G	5.08 BSC	0.200 BSC		
H	0.72	0.86	0.028	0.034
J	0.74	0.01	0.029	0.040
K	12.70	19.05	0.500	0.750
L	6.35	--	0.25	--
M	45° BSC	45° BSC		
P	--	1.27	--	0.050
R	2.54	--	0.10	--

1 = COLLECTOR  
2 = BASE  
3 = EMITTER

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 50$ mA	16			V
$BV_{CES}$	$I_C = 50$ mA	36			V
$BV_{EBO}$	$I_E = 1.0$ mA	4.0			V
$I_{CBO}$	$V_{CB} = 15$ V			1.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 100$ mA	20		200	---
$C_{OB}$	$V_{CB} = 12.5$ V $f = 1.0$ MHz			15	pF
$P_G$	$V_{CC} = 12.5$ V $P_{OUT} = 2.0$ W $f = 470$ MHz	8.0			dB
$\eta_C$		50			%