

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 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	35 °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
η_C		50			%