

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI MRF630** is Designed for UHF large signal, FM Land Mobile Applications up to 512 MHz.

FEATURES:

- Grounded Emitter
- $P_G = 9.5$ dB at 3.0 W/470 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	1.0 A
V_{CEO}	16 V
V_{CES}	36 V
V_{EBO}	4.0 V
P_{DISS}	8.75 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	20 °C/W

PACKAGE STYLE TO 205AD

DIM	MILLIMETERS		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 $T_C = 25$ °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_{CES}	$V_{CE} = 12.5$ V			1.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 100$ mA	20			---
C_{OB}	$V_{CB} = 12.5$ V $f = 1.0$ MHz		8.0	12	pF
P_G η_C	$V_{CC} = 12.5$ V $P_{OUT} = 3.0$ W $f = 470$ MHz	9.5	10.8 55		dB %