



# MRF630

## NPN SILICON RF POWER TRANSISTOR

### DESCRIPTION:

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

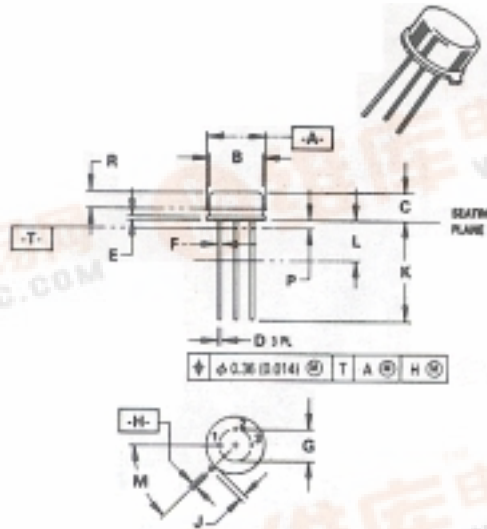
### FEATURES:

- 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 @ $T_C = 25^\circ C$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	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 $T_C = 25^\circ C$

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
$P_G$	$V_{CC} = 12.5$ V	$P_{OUT} = 3.0$ W	$f = 470$ MHz	9.5	10.8		dB
$\eta_c$					55		%