

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI MRF329** is Designed for Wide Band Large-Signal Output and Driver Amplifier Stages in the 100-500 MHz Frequency Range.

**FEATURES INCLUDE:**

- Gold Metalization
- **3:1 VSWR**
- **I/O Network Matching**

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	9.0 A (CONT) 12.0 A (PEAK)
<b>V<sub>CB</sub></b>	60 V
<b>P<sub>DISS</sub></b>	270 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 °C to +150 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>θ<sub>JC</sub></b>	0.65 °C/W

PACKAGE STYLE .400X.425" 6L FLG.	
	1 & 3 = EMITTER    2 = COLLECTOR 4 = BASE

**CHARACTERISTICS** T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 80 mA	60			<b>V</b>
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 80 mA	60			<b>V</b>
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 80 mA	30			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 8.0 mA	4.0			<b>V</b>
<b>I<sub>CBO</sub></b>	V <sub>CB</sub> = 30 V			5.0	<b>mA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 4.0 A	20		80	<b>---</b>
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V    f = 1.0 MHz		95	125	<b>pF</b>
<b>G<sub>PE</sub></b> <b>η</b>	V <sub>CC</sub> = 28 V    P <sub>out</sub> = 100 W    f = 400 MHz	7.0 50	9.7 60		<b>dB</b> <b>%</b>
<b>ψ</b>	V <sub>CC</sub> = 28 V    P <sub>out</sub> = 100 W    f = 400 MHz V <sub>SWR</sub> = 3:1    ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			