

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

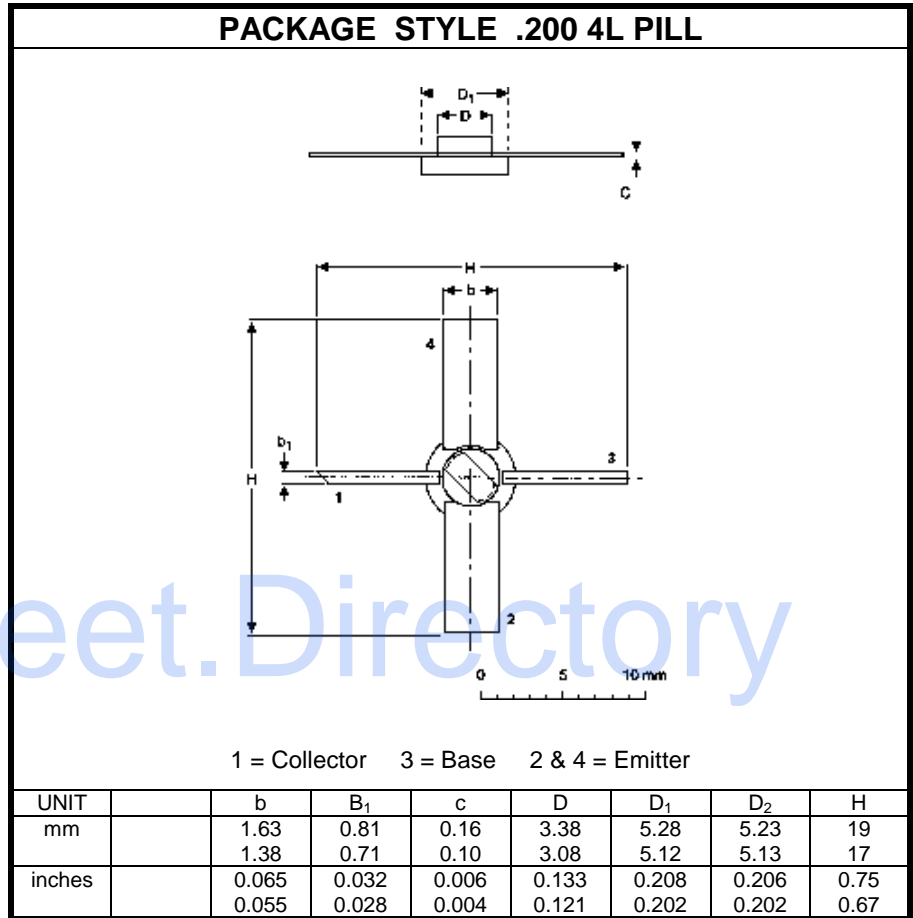
The **ASI MRW54001** is Designed for Class "A" and "AB" Amplifier Applications Up to 2.0 GHz.

**FEATURES:**

- **Omnigold™** Metalization System
- Implanted ballast resistors
- Common-Emitter

**MAXIMUM RATINGS**

<b>I</b>	160 mA
<b>V<sub>CEO</sub></b>	22 V
<b>V<sub>CES</sub></b>	50 V
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +200 °C
<b>θ<sub>JC</sub></b>	40 °C/W


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 10 mA	22			<b>V</b>
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 10 mA	50			<b>V</b>
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 1.0 mA	45			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 250 μA	3.5			<b>V</b>
<b>I<sub>CBO</sub></b>	V <sub>CB</sub> = 28 V			250	<b>μA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 100 mA	20		120	<b>---</b>
<b>f<sub>t</sub></b>	V <sub>CE</sub> = 20 V    I <sub>E</sub> = 120 mA	4.0	4.5		<b>GHz</b>
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V    f = 1.0 MHz			3.5	<b>pF</b>
<b>G<sub>PE</sub></b> <b>L<sub>G</sub></b>	V <sub>CE</sub> = 20 V    I <sub>CQ</sub> = 120 mA    P <sub>out</sub> = 0.5 W f = 2.0 GHz	10		-0.2/+1.0	<b>dB</b>