

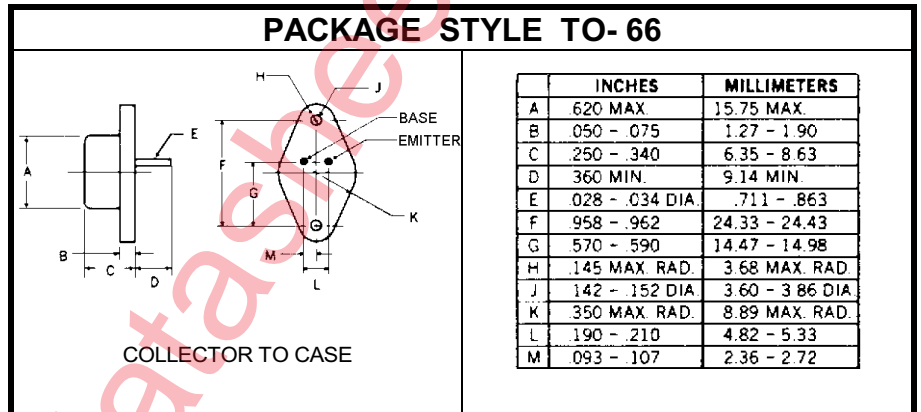
# SILICON NPN POWER TRANSISTOR

**DESCRIPTION:**

The **2N3054A** is a Medium Power Transistor for General Purpose Switching and Amplifier Applications

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	4.0 A 10 A (PEAK)
<b>V<sub>CE</sub></b>	55 V
<b>P<sub>DISS</sub></b>	75 W @ T <sub>C</sub> = 25 °C
<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>	2.33 °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> = 100 mA	55			<b>V</b>
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 100 mA    R <sub>BE</sub> = 100 Ω	60			<b>V</b>
<b>I<sub>CEO</sub></b>	V <sub>CE</sub> = 30 V			0.5	<b>mA</b>
<b>I<sub>CEX</sub></b>	V <sub>CE</sub> = 90 V    V <sub>BE</sub> = -1.5 V    T <sub>C</sub> = 25 °C T <sub>C</sub> = 150 °C			1.0 6.0	<b>mA</b>
<b>I<sub>EBO</sub></b>	V <sub>EB</sub> = 7.0 V			1.0	<b>mA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 4.0 V    I <sub>C</sub> = 500 mA I <sub>C</sub> = 3.0 A	25 5.0		150	<b>---</b>
<b>V<sub>CE(SAT)</sub></b>	I <sub>C</sub> = 500 mA    I <sub>B</sub> = 50 mA I <sub>C</sub> = 3.0 A    I <sub>B</sub> = 1.0 A			1.0 6.0	<b>V</b>
<b>V<sub>BE(ON)</sub></b>	V <sub>CE</sub> = 4.0 V    I <sub>C</sub> = 500 mA			1.7	<b>V</b>
<b>h<sub>fe</sub></b>	V <sub>CE</sub> = 4.0 V    I <sub>C</sub> = 100 mA    f = 1.0 KHz	25		180	<b>---</b>
<b>fh<sub>fe</sub></b>	V <sub>CE</sub> = 4.0 V    I <sub>C</sub> = 100 mA	30			<b>KHz</b>
<b>f<sub>t</sub></b>	V <sub>CE</sub> = 10 V    I <sub>C</sub> = 200 mA    f = 1.0 MHz	3.0			<b>MHz</b>