

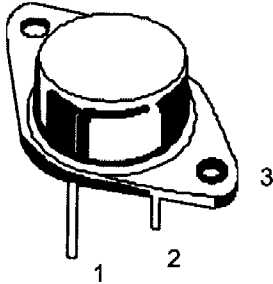
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**NPN SILICON POWER TRANSISTOR**

**2N3054 2N3054A**



- PIN**
- 1. BASE
  - 2. EMITTER
  - 3. COLLECTOR (CASE)

**TO-66**  
**Metal Can Package**

**Applications :**

Designed for General Purpose Switching and Amplifier Applications

**ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C)**

DESCRIPTION	SYMBOL	VALUE		UNITS
Collector Base Voltage	V <sub>CBO</sub>	90		V
Collector Emitter Voltage	V <sub>CEO</sub>	55		V
Emitter Base Voltage	V <sub>EBO</sub>	7		V
Collector Current	I <sub>C</sub>	4		A
Base Current	I <sub>B</sub>	2		A
Total Power Dissipation @ T <sub>C</sub> =25°C	P <sub>D</sub>	2N3054	25	W
		2N3054A	75	
Junction Temperature	T <sub>J</sub>	200		°C
Storage Temperature	T <sub>stg</sub>	- 65 to +200		°C

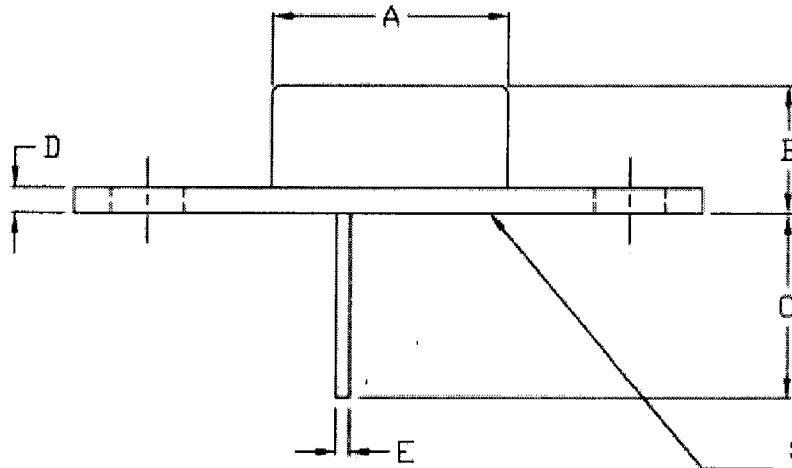
**THERMAL CHARACTERISTICS**

DESCRIPTION	SYMBOL	MAX		UNITS
Thermal Resistance, Junction to Case	R <sub>th J-C</sub>	2N3054	7.0	°C/W
	R <sub>th J-C</sub>	2N3054A	2.33	

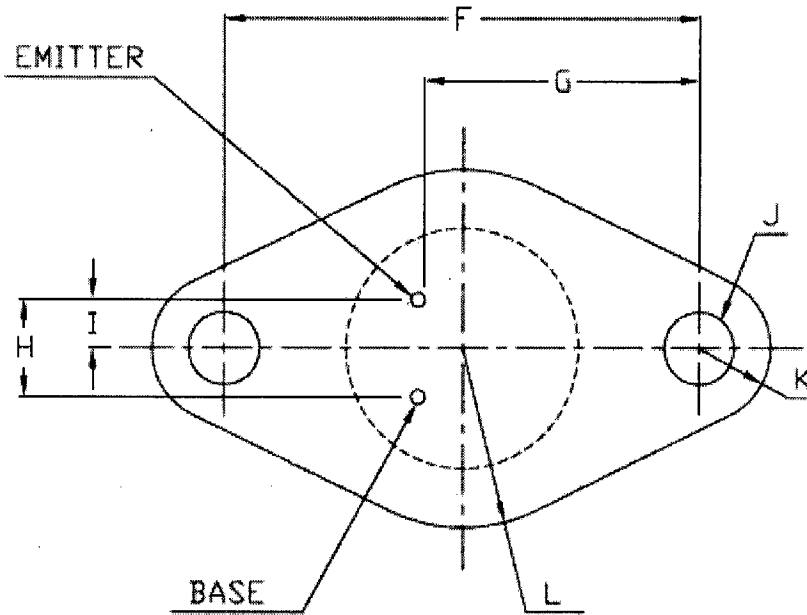
**ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Collector Emitter Sustaining Voltage	V <sub>CEO</sub>	I <sub>C</sub> =0.1A, I <sub>B</sub> =0	55		V
Collector Cut Off Current	I <sub>CEO</sub>	V <sub>CE</sub> =30V, I <sub>B</sub> =0		0.5	mA
Collector Cut Off Current	I <sub>CEX</sub>	V <sub>CE</sub> =90V, V <sub>BE(off)</sub> =1.5V		1.0	mA
Emitter Cut Off Current	I <sub>EBO</sub>	V <sub>EB</sub> =7V, I <sub>C</sub> =0		1.0	mA
DC Current Gain	h <sub>FE-1</sub>	I <sub>C</sub> =0.1A, V <sub>CE</sub> =10V	40		
	h <sub>FE-2</sub>	I <sub>C</sub> =1A, V <sub>CE</sub> =2V	8	140	
Collector Emitter Saturation Voltage	V <sub>CE(sat)-1</sub>	I <sub>C</sub> =0.5A, I <sub>B</sub> =50mA		1.0	V
	V <sub>CE(sat)-2</sub>	I <sub>C</sub> =3A, I <sub>B</sub> =1A		6.0	V
Base Emitter On Voltage	V <sub>BE(ON)</sub>	I <sub>C</sub> =0.5A, V <sub>CE</sub> =4V		1.7	V
Current Gain-Bandwidth Product	f <sub>r</sub>	I <sub>C</sub> =0.2A, V <sub>CE</sub> =10V, f=1MHz	3		MHz

### TO-66 Package Outline and Dimension



**SEATING PLANE:**  
 The Seating Plane must be within 0.001" Concave to 0.004" Convex within .600" Diameter from the centre of the Device.



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A(DIA)	0.470	0.500	11.94	12.70
B	0.250	0.340	6.35	8.64
C	0.360	-	9.14	-
D	0.050	0.075	1.27	1.91
E(DIA)	0.028	0.034	0.71	0.86
F	0.958	0.962	24.33	24.43
G	0.570	0.590	14.48	14.99
H	0.190	0.210	4.83	5.33
I	0.093	0.107	2.36	2.72
J(DIA)	0.142	0.152	3.61	3.86
K(RAD)	0.145		3.68	
L(RAD)	0.350		8.89	