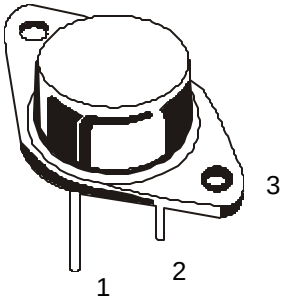
NPN SILICON POWER TRANSISTOR

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_A = 25°C)

DESCRIPTION	SYMBOL	VALUE		UNITS
Collector Base Voltage	V_{CBO}	90		V
Collector Emitter Voltage	V_{CEO}	55		V
Emitter Base Voltage	V_{EBO}	7		V
Collector Current	I_C	4		A
Base Current	I_B	2		A
Total Power Dissipation @ Tc=25°C	P_D	2N3054	25	W
		2N3054A	75	
Junction Temperature	T_j	200		°C
Storage Temperature	T_{stg}	- 65 to +200		°C

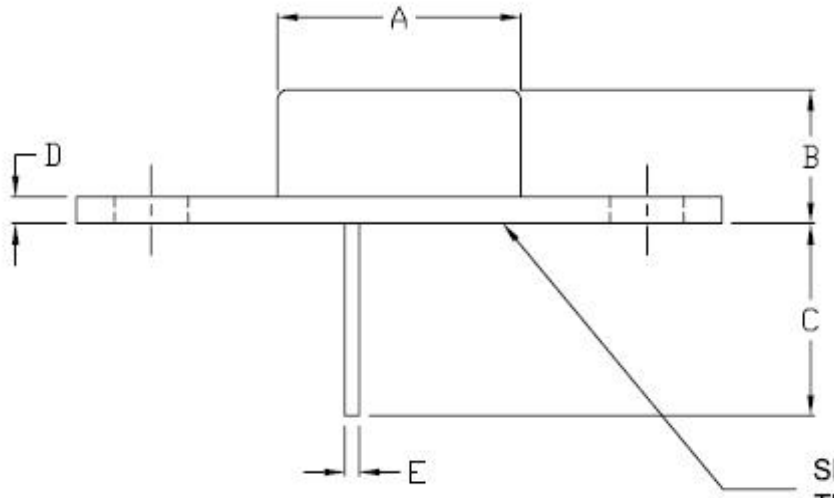
THERMAL CHARACTERISTICS

DESCRIPTION	SYMBOL	MAX		UNITS
Thermal Resistance, Junction to Case	$R_{th\ J\text{-}C}$	2N3054	7.0	°C/W
	$R_{th\ J\text{-}C}$	2N3054A	2.33	

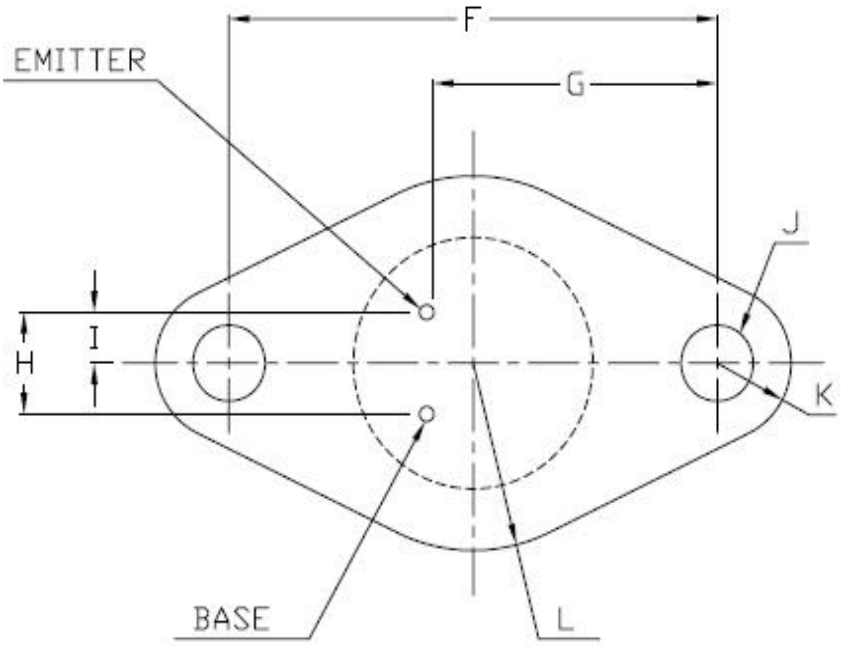
ELECTRICAL CHARACTERISTICS (T_J=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Collector Emitter Sustaining Voltage	V_{CEO}	I_C=0.1A, I_B=0	55		V
Collector Cut Off Current	I_{CEO}	V_{CE}=30V, I_B=0		0.5	mA
Collector Cut Off Current	I_{CEX}	V_{CE}=90V, $V_{BE(off)}$=1.5V		1.0	mA
Emitter Cut Off Current	I_{EBO}	V_{EB}=7V, I_C=0		1.0	mA
DC Current Gain	$h_{FE\ -\ 1}$	I_C=0.1A, V_{CE}=10V	40		
	$h_{FE\ -\ 2}$	I_C=1A, V_{CE}=2V	8	140	
Collector Emitter Saturation Voltage	$V_{CE(sat)\ -\ 1}$	I_C=0.5A, I_B=50mA		1.0	V
	$V_{CE(sat)\ -\ 2}$	I_C=3A, I_B=1A		6.0	V
Base Emitter On Voltage	$V_{BE(ON)}$	I_C=0.5A, V_{CE}=4V		1.7	V
Current Gain-Bandwidth Product	f_T	I_C=0.2A, V_{CE}=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				
	INCHES		MILLIMETERS	
SYMBOL	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	

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.

CDIL is a registered Trademark of
Continental Device India Pvt. Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119
email@cdil.com www.cdil.com
CIN No.- U32109DL1964PLC004291