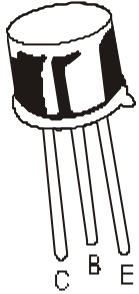


NPN SILICON PLANAR TRANSISTOR

2N3553

TO-39

Metal Can Package



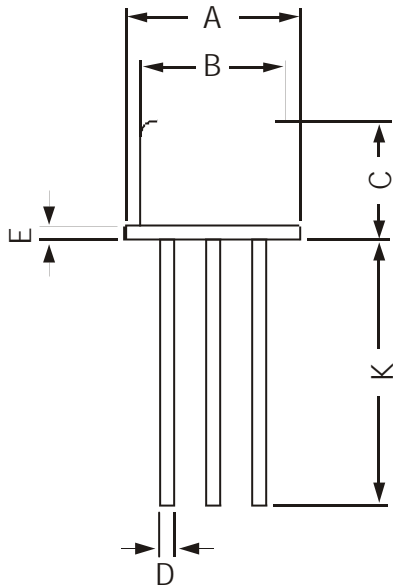
ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$ unless noted otherwise)

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Base Voltage	V_{CBO}	65	V
Collector Emitter Voltage	V_{CEO}	40	
Emitter Base Voltage	V_{EBO}	4	
Collector Current Continuous	I_C	1	A
Total Power Dissipation @ $T_C=25^\circ\text{C}$	P_D	7	W
Derate above 25°C		40	mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +200	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless specified otherwise)

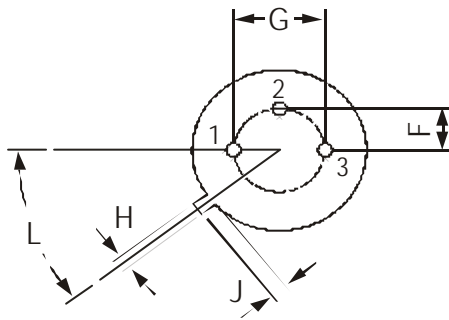
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP.	MAX.	UNIT
Collector Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=200\text{mA}, I_B=0$	40			V
Emitter Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=0.1\text{mA}, I_C=0$	4			V
Collector Cut off Current	I_{CEO}	$V_{CE} = 30\text{V}, I_B=0$			0.1	mA
Collector Cut Off Current	I_{CEX}	$V_{CE}=65\text{V}, V_{BE(OFF)}=1.5\text{V}$			1	
Emitter Cut Off Current	I_{EBO}	$V_{BE}=4\text{V}, I_C=0$			0.1	
DC Current Gain	h_{FE}	$V_{CE}=1\text{V}, I_C = 250\text{mA}$	10			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=250\text{mA}, I_B=50\text{mA}$			1.0	V
Collector Output Capacitance	C_{ob}	$V_{CB} = 30\text{V}, I_E = 0, f = 100\text{KHz}$		8	10	pF

TO-39 PACKAGE OUTLINE AND DIMENSION



All dimensions are in mm

DIM	MIN	MAX
A	8.50	9.39
B	7.74	8.50
C	6.09	6.60
D	0.40	0.53
E	—	0.88
F	2.41	2.66
G	4.82	5.33
H	0.71	0.86
J	0.73	1.02
K	12.70	—
L	42 DEG	48 DEG



PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-39	500 pcs/polybag	540 gm/500 pcs	3" x 7.5" x 7.5"	20K	17" x 15" x 13.5"	32K	40 kgs



Continental Device India Limited

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Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete 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 are 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 Discrete 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).

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