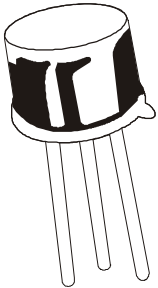


PNP SILICON PLANAR TRANSISTOR

**2N4036
TO-39**



General Purpose Transistor

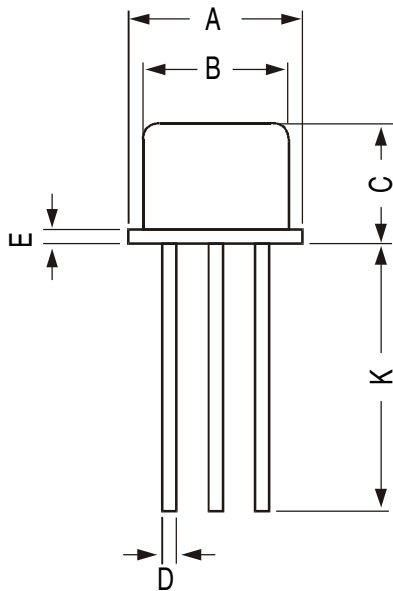
ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Emitter Voltage	VCEO	65	V
Collector -Base Voltage	VCBO	90	V
Emitter Base Voltage	VEBO	7.0	V
Base Current	IB	0.5	A
Collector Current -Continuous	IC	1.0	A
Power Dissipation @ Tc=25 deg C	PD	5.0	W
Linear Derating Factor		28.6	mW/deg C
Power Dissipation @ Ta=25 deg C	PD	1.0	W
Linear Derating Factor		5.72	mW/deg C
Operating & Storage Junction Temperature Range	Tj, Tstg	-65 to +200	deg C
Lead Temperature 1/16" from Case for 10 Seconds	TL	230	deg C
Thermal Resistance			
Junction to Case	Rth (j-c)	35	deg C/W

ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

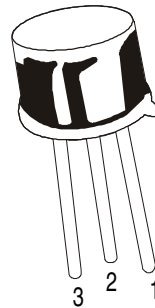
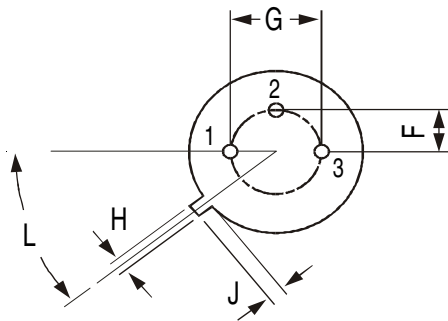
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector -Emitter Voltage	VCEO	IC=10mA, IB=0	65	-	-	V
Collector -Base Voltage	VCBO	IC=100uA, IE=0	90	-	-	V
Collector Cut off Current	ICEX	VCE=85V, VBE=1.5V	-	-	0.1	mA
	ICBO	VCB=90V, IE=0	-	-	1.0	uA
Emitter Cut off Current	IEBO	VBE=7V, IC=0	-	-	10	uA
DC Current Gain	hFE	0.1mA, VCE=10V	20	-	-	
		IC=150mA, VCE=2V	20	-	200	
		IC=150mA, VCE=10V	40	-	140	
		IC=500mA, VCE=10V	20	-	-	
Collector -Emitter (sat) Voltage	VCE(sat)	IC=150mA, IB=15mA	-	-	0.65	V
Base -Emitter (sat) Voltage	VBE(sat)	IC=150mA, IB=15mA	-	-	1.4	V
Small- Signal Characteristics						
Current Gain- High Frequency	lhfe1	IC=50mA, VCE=10V, f=20MHz	3.0	-	-	
Switching Characteristics						
Rise time	tr	IB1=15mA, IC=150mA, VCE=30V	-	-	70	ns
Storage time	ts	IB2=15mA, IC=150mA, VCE=30V	-	-	600	ns
Fall time	tf	IB2=15mA, IC=150mA, VCE=30V	-	-	100	ns
Turn-on time	ton	IC=150mA, VCE=30V, IB1=IB2=	-	-	110	ns
Turn-off time	toff	15mA	-	-	700	ns

TO-39 Metal Can Package



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"	20.0K	17" x 15" x 13.5"	32.0K	40 kgs

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 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 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).

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 Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119

email@cdil.com www.cdilsemi.com