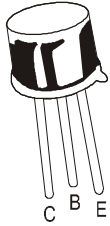


NPN SILICON PLANAR TRANSISTORS

**2N5336 / 2N5337
2N5338 / 2N5339**



**TO-39
Metal Can Package**

ABSOLUTE MAXIMUM RATINGS

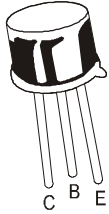
DESCRIPTION	SYMBOL	2N5336 / 2N5337	2N5338 / 2N5339	UNIT
Collector Base Voltage	V_{CBO}	80	100	V
Collector Emitter Voltage	V_{CEO}	80	100	V
Emitter Base Voltage	V_{EBO}	6.0	6.0	V
Collector Current Continuous	I_C	5.0	5.0	A
Base Current	I_B	1.0	1.0	A
Power Dissipation at $T_a=25^\circ\text{C}$	P_D	6.0	6.0	W
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200		$^\circ\text{C}$
Thermal Resistance	$R_{th(j-c)}$	29		$^\circ\text{C/W}$

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Base Cut Off Current	I_{CBO}	$V_{CB} = \text{Rated } V_{CBO}$		10	mA
Collector Emitter Cut Off Current	I_{CEX}	$V_{CE} = 75\text{V}, V_{EB} = 1.5\text{V}$	2N5336/ 2N5337	10	mA
		$V_{CE} = 90\text{V}, V_{EB} = 1.5\text{V}$	2N5338/ 2N5339	10	mA
Collector Emitter Cut Off Current	I_{CEO}	$V_{CE} = 75\text{V}$	2N5336/ 2N5337	10	mA
		$V_{CE} = 90\text{V}$	2N5338/ 2N5339	10	mA
Emitter Base Cut Off Current	I_{EBO}	$V_{BE}=6\text{V}$		100	mA
Collector Emitter Voltage	V_{CEO}	$I_C=50\text{mA}$	2N5336/ 2N5337	80	V
			2N5338/ 2N5339	100	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2\text{A}, I_B=0.2\text{A}$		0.7	V
		$I_C=5\text{A}, I_B=0.5\text{A}$		1.2	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2\text{A}, I_B=0.2\text{A}$		1.2	V
		$I_C=5\text{A}, I_B=0.5\text{A}$		1.8	V
DC Current Gain	hFE	$I_C=500\text{mA}, V_{CE}=2\text{V}$	2N5336/ 2N5338	30	
			2N5337/ 2N5339	60	
		$I_C=2\text{A}, V_{CE}=2\text{V}$	2N5336/ 2N5338	30	120
			2N5337/ 2N5339	60	240
		$I_C=5\text{A}, V_{CE}=2\text{V}$	2N5336/ 2N5338	20	
			2N5337/ 2N5339	40	

NPN SILICON PLANAR TRANSISTORS

**2N5336 / 2N5337
2N5338 / 2N5339**

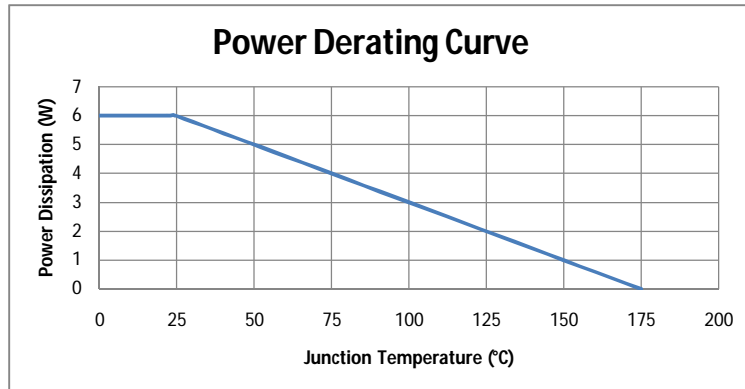


**TO-39
Metal Can Package**

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

SMALL SIGNAL CHARACTERISTICS

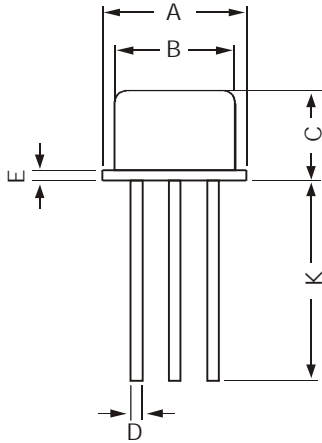
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Transition Frequency	f_T	$V_{CE}=10\text{V}, I_C=0.5\text{A}, f=10\text{MHz}$	30		MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=0.1\text{MHz}$		250	pF
Input Capacitance	C_{ib}	$V_{EB}=2\text{V}, I_C=0, f=0.1\text{MHz}$		1000	pF
ON Time	t_{ON}	$V_{CC} = 40\text{V}, I_C = 2\text{A}, I_{B1} = 0.2\text{A}$		200	ns
Storage Time	t_s	$V_{CC} = 40\text{V}, I_C = 2\text{A}, I_{B1} = I_{B2} = 0.2\text{A}$		2	ms
Fall Time	t_f	$V_{CC} = 40\text{V}, I_C = 2\text{A}, I_{B1} = I_{B2} = 0.2\text{A}$		200	ns



**2N5336 / 2N5337
2N5338 / 2N5339**

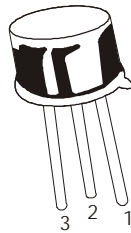
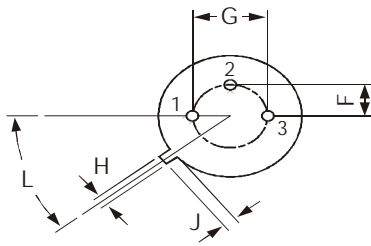
**TO-39
Metal Can Package**

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"	20K	17" x 15" x 13.5"	32K	40 kgs

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).



Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



Customer Notes

**2N5336 / 2N5337
2N5338 / 2N5339**

**TO-39
Metal Can Package**

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

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 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 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, 4141 1112 Fax + 91-11-2579 5290, 4141 1119
email@cdil.com www.cdil.com

2N5336_5339 Rev_1 130912E

2N5336_5339 Rev_2 21032014E

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [CDIL manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)