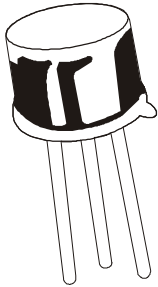


PNP SILICON PLANAR EPITAXIAL TRANSISTORS

**BSV15
BSV16
BSV17
TO- 39**



ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	BSV15	BSV16	BSV17	UNIT
Collector -Emitter Voltage	VCEO	40	60	80	V
Collector -Emitter Voltage	VCES	40	60	90	V
Emitter -Base Voltage	VEBO	5.0	5.0	5.0	V
Collector Current (DC)	IC		1.0		A
Base Current (DC)	IB		200		mA
Power Dissipation up to Tamb=25 degC	Ptot		0.8		W
Power Dissipation up to Tcase=25 degC			5.0		W
Power Dissipation up to Tmb=50 degC			5.0		W
Operating And Storage Junction Temperature Range	Tj, Tstg		-65 to +200		deg C
THERMAL RESISTANCE					
Junction to Ambient	Rth(j-a)		220		K/W
Junction to Case	Rth(j-c)		35		K/W
Junction to Mounting Base	Rth(j-mb)		30		K/W

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

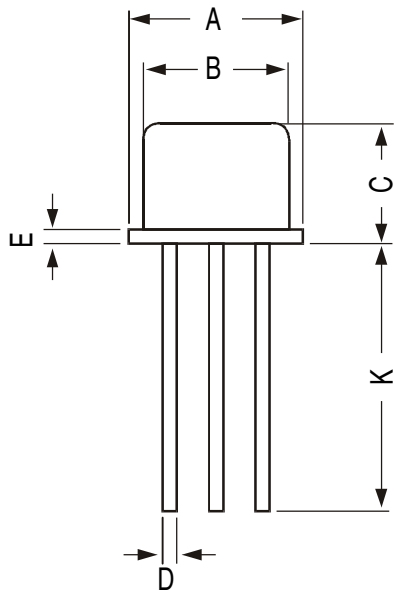
DESCRIPTION	SYMBOL	TEST CONDITION	BSV15	BSV16	BSV17	UNIT	
Collector-Cut off Current	ICES	VBE=0, VCE=40V	<100	-	-	nA	
		VBE=0, VCE=60V	-	<100	-	nA	
		VBE=0, VCE=80V	-	-	<100	nA	
	ICEX	Tamb=150 deg C					
		VBE=0, VCE=40V	<50	-	-	uA	
		VBE=0, VCE=60V	-	<50	-	uA	
		VBE=0, VCE=80V	-	-	<50	uA	
Emitter-Cut off Current	IEBO	Tamb=100 deg C					
		VBE=0.2V, VCE=40V	<50	-	-	uA	
		VBE=0.2V, VCE=60V	-	<50	-	uA	
		VBE=0.2V, VCE=80V	-	-	<50	uA	
Collector -Emitter Voltage	VCEO*	IC=50mA, IB=0	>40	>60	>80	V	
		VCES	VBE=0, IC=10uA	>40	>60	>90	V
Emitter-Base Voltage	VEBO	IE=10uA, IC=0	>5.0	>5.0	>5.0	V	
Base Emitter on Voltage	VBE(on)	IC=100mA, VCE=1V	ALL	<1.0		V	
		IC=500mA, VCE=1V	ALL	0.7 to 1.4		V	
Collector Emitter Saturation Voltage	VCE(Sat)	IC=500mA, IB=25mA	ALL	<1.0		V	

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT	
DC Current	hFE	IC=0.1mA, VCE=1V					
		BSV15-10	20	-	-		
		BSV16-10	20	-	-		
		BSV17-10	20	-	-		
		BSV15-16	30	-	-		
		BSV16-16	30	-	-		
		IC=100mA, VCE=1V					
		BSV15-10	63	-	160		
		BSV16-10	63	-	160		
		BSV17-10	63	-	160		
		BSV15-16	100	-	250		
		BSV16-16	100	-	250		
		IC=500mA, VCE=1V					
		BSV15-10	25	-	-		
		BSV16-10	25	-	-		
BSV17-10	25	-	-				
BSV15-16	35	-	-				
BSV16-16	35	-	-				
Collector Capacitance	Cc	IE=ie=0, VCB=10V, f=1MHz					
		BSV15	-	-	30	pF	
		BSV16	-	-	30	pF	
Emitter Capacitance	Ce	IC=Ic=0, VEB=0.5V, f=1MHz					
		ALL	-	180	-	pF	
Transition Frequency	ft	VCE=10V, IC=50mA, f=20MHz					
		ALL	50	-	-	MHZ	
Small Signal Current Gain	hfe	IC=1mA, VCE=5V, f=1kHz					
		ALL	20	-	-		
Switching Time							
Turn off time	ton		-	-	500	ns	
	toff	IC=100mA, -IB=+IBM=5mA	-	-	650	ns	
Stroage time	ts		-	-	500	ns	
Fall time	tf		-	-	150	ns	

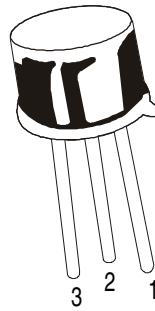
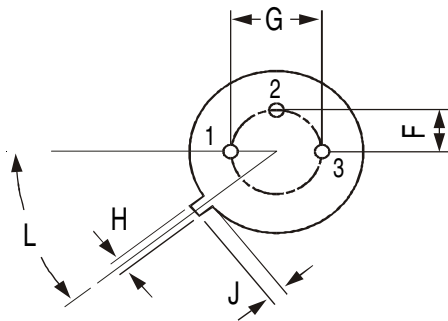
*Pulse time= 200us, duty cycle=1%

TO-39 Metal Can Package



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

All dimensions are in mm



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 + 91-11-579 6150 Fax + 91-11-579 9569, 579 5290

e-mail sales@cdil.com www.cdil.com