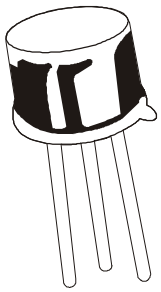
PNP SILICON PLANAR EPITAXIAL TRANSISTORS

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)

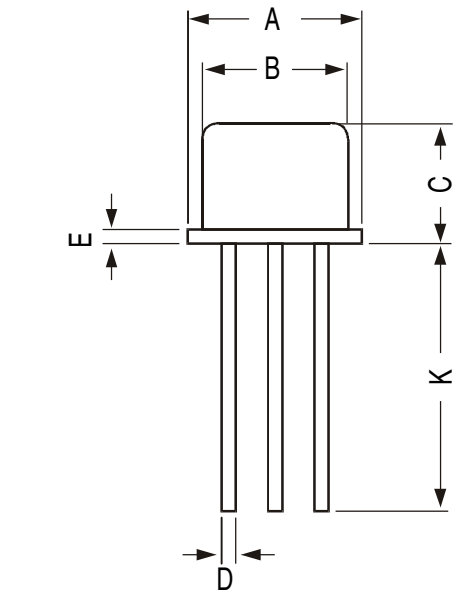
DESCRIPTION	SYMBOL	TEST CONDITION	BSV15	BSV16	BSV17	UNIT
Collector-Cut off Current	ICES	VBE=0, VCE=40V	<100	-	-	nA
		VBE=0, VCE=60V	-	<100	-	nA
		VBE=0, VCE=80V	-	-	<100	nA
		Tamb=150 deg C				
		VBE=0, VCE=40V	<50	-	-	uA
		VBE=0, VCE=60V	-	<50	-	uA
		VBE=0, VCE=80V	-	-	<50	uA
	ICEX	Tamb=100 deg C				
		VBE=0.2V, VCE=40V	<50	-	-	uA
		VBE=0.2V, VCE=60V	-	<50	-	uA
		VBE=0.2V, VCE=80V	-	-	<50	uA
Emitter-Cut off Current	IEBO	IC=0, VEB=4V	<50	<50	<50	nA
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
		BSV17	-	-	25	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						
	ton		-	-	500	ns
Turn off time	toff	IC=100mA, -IB=+IBM=5mA	-	-	650	ns
Stroage time	ts		-	-	500	ns
Fall time	tf		-	-	150	ns

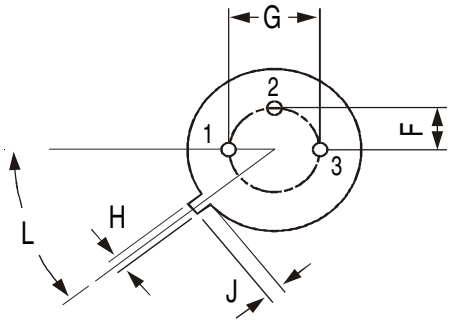
***Pulse time= 200us, duty cycle=1%**

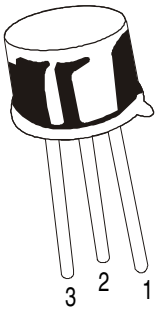
TO-39 Metal Can Package



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

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