



TRANSISTOR (NPN)

FEATURES

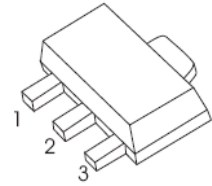
- PNP Complements to BCX51,BCX52,BCX53
- Low Voltage
- High Current

APPLICATIONS

- Driver Stages of Audio Amplifiers

SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER



MARKING:BCX54:BA, BCX54-10:BC, BCX54-16:BD
BCX55:BE, BCX55-10:BG, BCX55-16BM
BCX56:BH, BCX56-10:BK, BCX56-16:BL

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

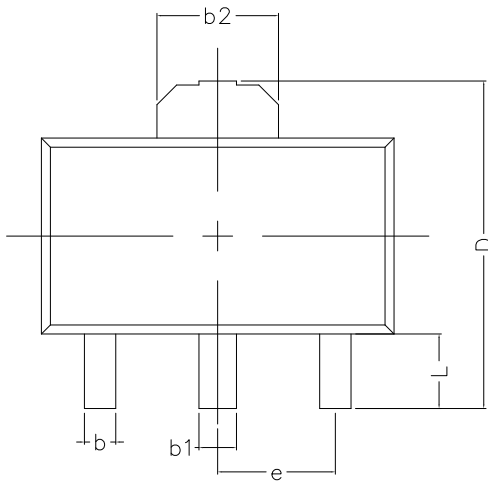
Symbol	Parameter		Value	Unit
V_{CBO}	Collector-Base Voltage	BCX54	45	V
		BCX55	60	
		BCX56	100	
V_{CEO}	Collector-Emitter Voltage	BCX54	45	V
		BCX55	60	
		BCX56	80	
V_{EBO}	Emitter-Base Voltage		5	V
I_{C}	Collector Current		1	A
P_{C}	Collector Power Dissipation		500	mW
$R_{\theta\text{JA}}$	Thermal Resistance From Junction To Ambient		250	$^{\circ}\text{C}/\text{W}$
T_{j}	Junction Temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature		-55~+150	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)**

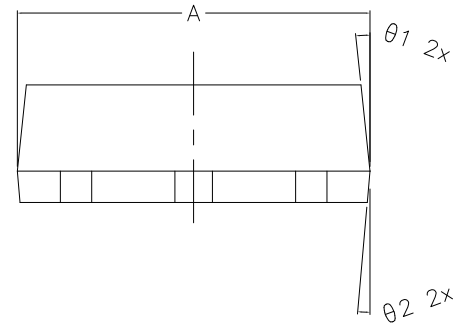
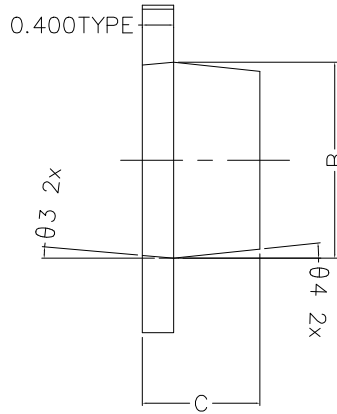
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	BCX54	45		V
			BCX55	60		
			BCX56	100		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	BCX54	45		V
			BCX55	60		
			BCX56	80		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$		5		V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2V, I_C=5mA$	40			
	$h_{FE(2)}$	$V_{CE}=2V, I_C=150mA$	63		250	
	$h_{FE(3)}$	$V_{CE}=2V, I_C=0.5A$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=0.5A, I_B=50mA$			0.5	V
Base -emitter voltage	V_{BE}	$V_{CE}=2V, I_C=0.5A$			1	V
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA, f=100MHz$		130		MHz

CLASSIFICATION OF $h_{FE(2)}$

RANK	BCX54	BCX54-10	BCX54-16
	BCX55	BCX55-10	BCX55-16
	BCX56	BCX56-10	BCX56-16
RANGE	63 - 250	63 - 160	100 - 250



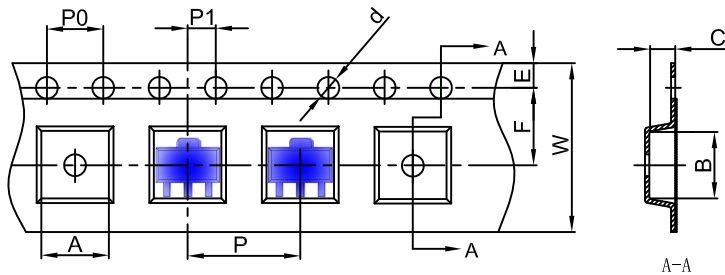
TOP VIEW



COMMON DIMENSIONS (UNITS OF MEASURE IS mm)			
	MIN	NORMAL	MAX
A	4.450	4.550	4.650
B	2.450	2.550	2.650
C	1.400	1.500	1.600
D	4.100	4.200	4.300
L	0.850	0.950	1.050
b	0.350	0.400	0.450
b1	0.430	0.480	0.530
b2	1.500	1.550	1.600
e	1.500TYPE		
θ_1	6° TYPE		
θ_2	5° TYPE		
θ_3	5° TYPE		
θ_4	6° TYPE		

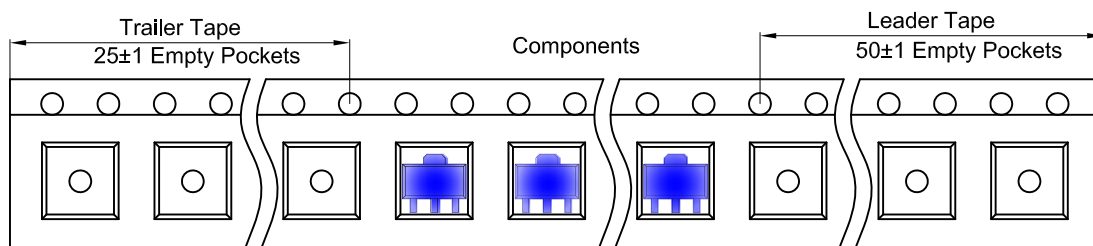


SOT-89-3L Embossed Carrier Tape

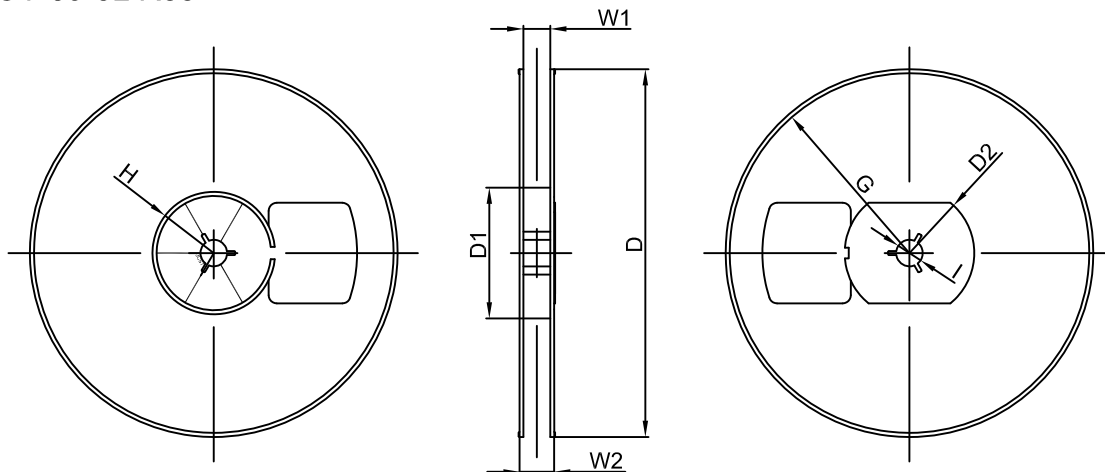


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-89-3L	4.8	4.7	1.85	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00
	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0	+0.10 -0.10	+0.05 -0.05	+0.10 -0.10	+0.10 -0.10	+0.05 -0.05	+0.30 -0.10

SOT-89-3L Tape Leader and Trailer



SOT-89-3L Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø180.00	60.00	R32.00	R86.50	R30.00	Ø13.00	12.70	15.90

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
1000 pcs	7 inch	10,000 pcs	212x212x215	40,000 pcs	437x435x230	