

SOT-89 Plastic-Encapsulate Transistors

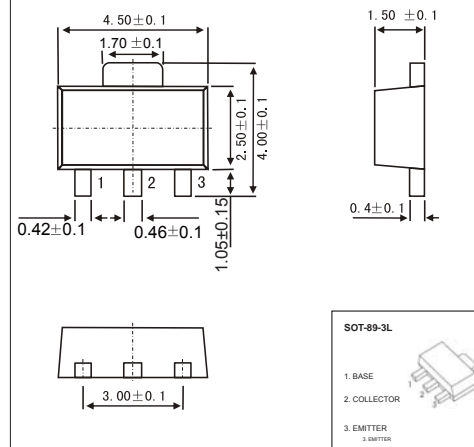
FEATURES

- TRANSISTOR(NPN)
- PNP Complements to BCX51,BCX52,BCX53
- Low Voltage
- High Current

MECHANICAL DATA

- Case style:SOT-89 -3L molded plastic
- Mounting position:any

SOT-89-3L



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	BCX54	45
		BCX55	60
		BCX56	100
V_{CEO}	Collector-Emitter Voltage	BCX54	45
		BCX55	60
		BCX56	80
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	1	A
I_B	Base Current	0.1	A
I_{BM}	Peak base Current (tp<1ms)	0.2	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit		
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	BCX54			V		
			BCX55					
			BCX56					
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	BCX54			V		
			BCX55					
			BCX56					
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	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 BCX55 BCX56	BCX54-10 BCX55-10 BCX56-10	BCX54-16 BCX55-16 BCX56-16
RANGE	63 - 250	63 - 160	100 - 250

MARKING:

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



HFZT

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

