

SOT-89 Plastic-Encapsulate Transistors

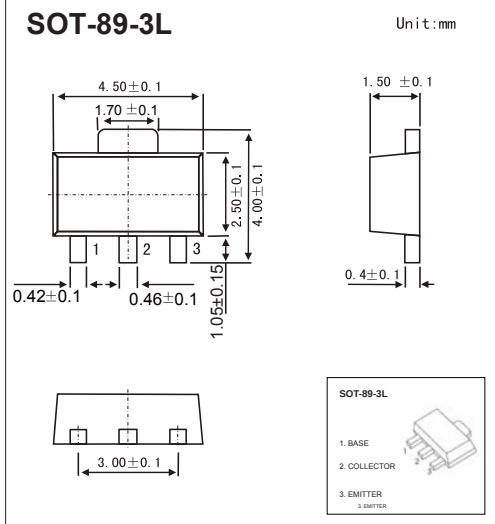
FEATURES

- TRANSISTOR (PNP)
- NPN Complements to BCX54,BCX55,BCX56
- 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	BCX51	-45
		BCX52	-60
		BCX53	-100
V_{CEO}	Collector-Emitter Voltage	BCX51	-45
		BCX52	-60
		BCX53	-80
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1	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	$V_{(BR)CBO}$	BCX51 $I_C=-100\mu A, I_E=0$				V
		BCX52				
		BCX53				
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	BCX51 $I_C=-10mA, I_B=0$				V
		BCX52				
		BCX53				
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	$h_{FE(1)}^*$	$V_{CE}=-2V, I_C=-5mA$	63			
	$h_{FE(2)}^*$	$V_{CE}=-2V, I_C=-150mA$	63		250	
	$h_{FE(3)}^*$	$V_{CE}=-2V, I_C=-0.5A$	40			
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	$V_{CE}=-5V, I_C=-10mA, f=100MHz$		50		MHz

* Pulse Test

CLASSIFICATION OF $h_{FE(2)}$

RANK	BCX51 BCX52 BCX53	BCX51-10 BCX52-10 BCX53-10	BCX51-16 BCX52-16 BCX53-16
RANGE	63~250	63~160	100~250

MARKING:

BCX51:AA, BCX51-10:AC, BCX51-16:AD BCX52:AE, BCX52-10:AG, BCX52-16:AM BCX53:A H, BCX53-10:AK, BCX53-16:AL



RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

