

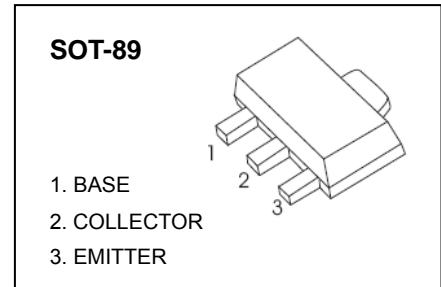
BCX51 THRU BCX53 TRANSISTOR(PNP)

FEATURES

- NPN Complements to BCX54,BCX55,BCX56
- Low Voltage
- High Current

APPLICATIONS

- Medium Power General Purposes
- Driver Stages of Audio Amplifiers



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

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ 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	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	BCX51	-45		V
			BCX52	-60		
			BCX53	-100		
Collector-emitter breakdown voltage	$V_{(BR)CEO^*}$	$I_C = -10mA, I_B = 0$	BCX51	-45		V
			BCX52	-60		
			BCX53	-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	$h_{FE(1)^*}$	$V_{CE} = -2V, I_C = -5mA$	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

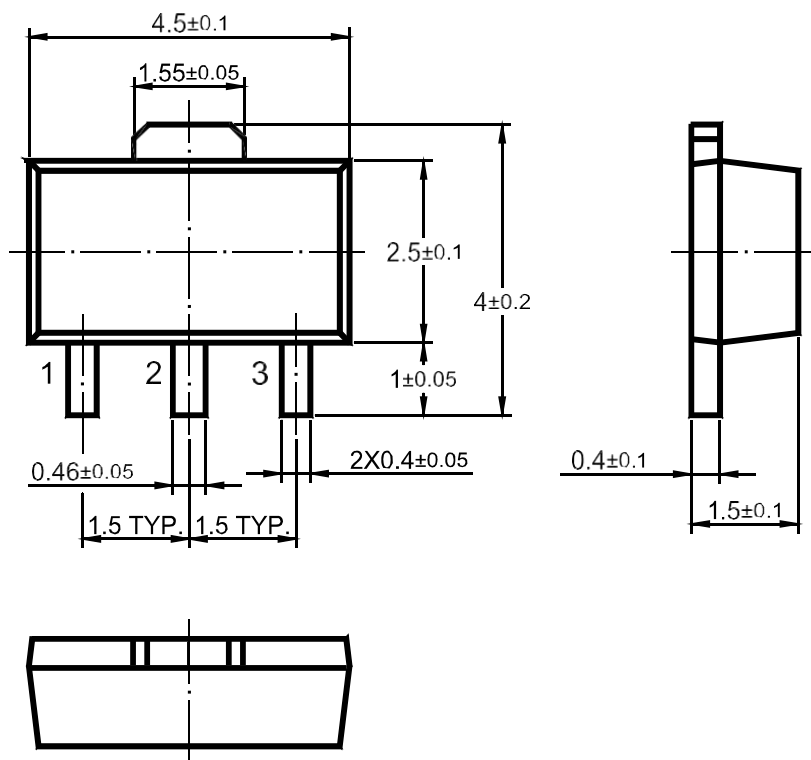
* Pulse Test

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

Physical Dimensions

SOT-89



Dimensions in mm