

SOT-89 Plastic-Encapsulate Transistors

BCX56-16

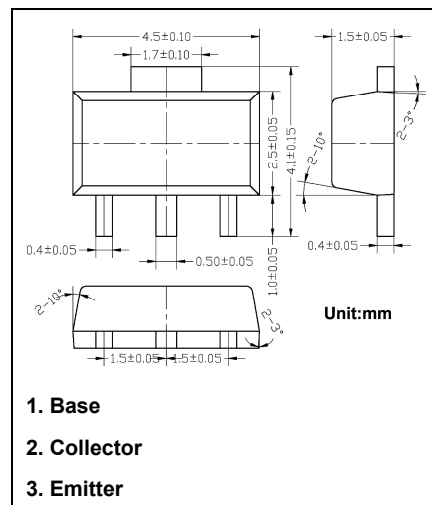
NPN Transistors

Features

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

Applications

- Driver Stages of Audio Amplifiers



Maximum Ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector Base Voltage	100	V
V _{CEO}	Collector Emitter Voltage	80	V
V _{EBO}	Emitter Base Voltage	5	V
I _c	Collector Current	1	A
P _c	Collector Power Dissipation	500	mW
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55 ~ +155	°C
R _{θJA}	Thermal Resistance from Junction to Ambient	250	°C/W

Electrical Characteristics (T_a=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C = 100μA, I _E = 0	100			V
V _{(BR)CEO} *	Collector-emitter breakdown voltage	I _C = 10mA, I _B = 0	80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E = 100μA, I _C = 0	5			V
I _{CBO}	Collector cut-off current	V _{CB} = 30V, I _E = 0			100	nA
I _{EBO}	Emitter cut-off current	V _{EB} = 5V, I _C = 0			100	nA
h _{FE(1)}	DC current gain*	V _{CE} = 2V, I _C = 5mA	40			
h _{FE(2)}		V _{CE} = 2V, I _C = 150mA	100		250	
h _{FE(3)}		V _{CE} = 2V, I _C = 500mA	25			
V _{CE(sat)}	Collector-emitter saturation voltage*	I _C = 0.5A, I _B = 50mA			0.5	V
V _{BE} *	Base -emitter voltage	V _{CE} = 2V, I _C = 0.5A			1	V
f _T	Transition frequency	V _{CE} =5V, I _C =10mA, f=100MHz		130		MHz

* Pulse Test

Typical Characteristics

