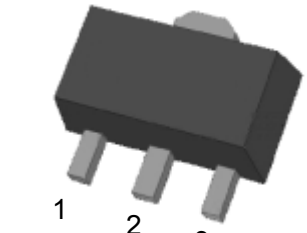
BCX56

SOT-89 NPN medium power transistor



Fearture

·High current (max. 1 A)

·Low voltage (max. 80 V).

APPLICATIONS

·Driver stages of audio and video amplifiers.

DESCRIPTION

·NPN medium power transistor in a SOT89 plastic

·package.

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	80	Vdc
Collector-Base Voltage	V_{CBO}	100	Vdc
Emitter-Base Voltage	V_{EBO}	5	Vdc
Collector Current(DC)	I_C	1	Adc
Peak Collector Current	I_{CM}	1.5	Adc
Peak Base Current	I_{BM}	0.2	Adc
Collector Power Dissipation	P_C	1.30	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

Note:1. Device mounted on a printed-circuit board, single sided copper, tinplated, mounting pad for collector 6 cm^2.

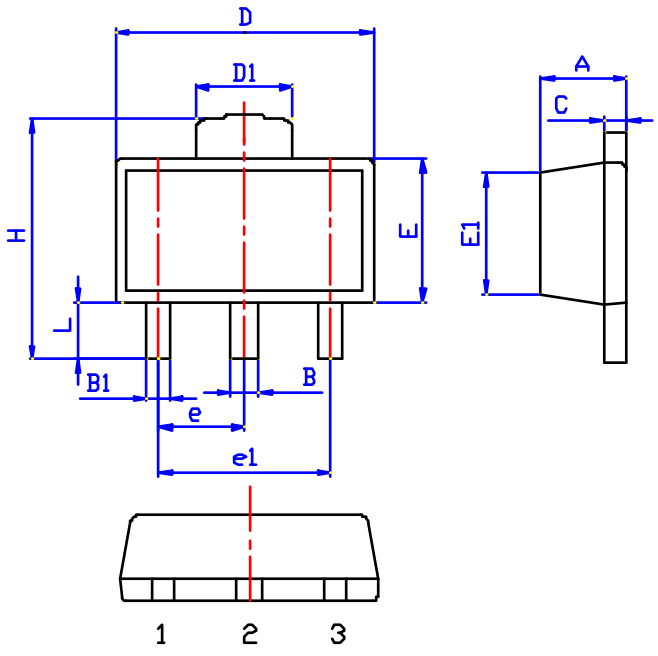
hFE CLASSIFICATION

TYPE	BCX56	BCX56-10	BCX56-16
MARKING	BH	BK	BL
hFE RANGE	63~250	63~160	100~250

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

Characteristic	Symbol	Test Condition	Min	Type	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}=30V,I_E=0	-	-	100	nA
		V_{CB}=30V,I_E=0, T_j=150℃	-	-	10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V,I_C=0	-	-	100	nA
DC Current Gain	h_{FE}	V_{CE}=2V,I_C=5mA	63	-	-	-
		V_{CE}=2V,I_C=150mA	63	-	250	
		V_{CE}=2V,I_C=500mA	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=500mA,I_B=50mA	-	-	0.5	V
Base-Emitter Voltage	V_{BE}	I_C = 500mA; V_{CE} =2 V	-	-	1	V
Transition Frequency	f_T	I_C = 10 mA; V_{CE} = 5 V; f = 100 MHz	-	130	-	MHz

SOT-89 PACKAGE OUTLINE DIMENSIONS



DIM	MILLIMETERS	
	MIN.	MAX.
A	1.40	1.60
B	0.46	0.56
B1	0.36	0.48
C	0.35	0.44
D	4.40	4.60
D1	1.62	1.83
E	2.29	2.60
E1	---	---
e	1.50REF	
e1	3.00REF	
H	3.94	4.25
L	0.89	1.20