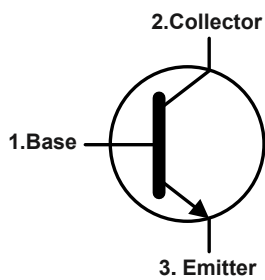


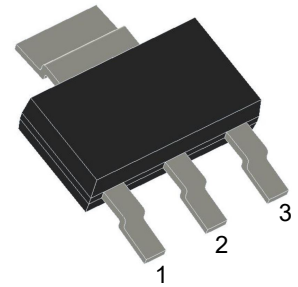
Features

- For AF driver and output stages
- High collector current
- Low collector-emitter saturation voltage

Equivalent Circuit

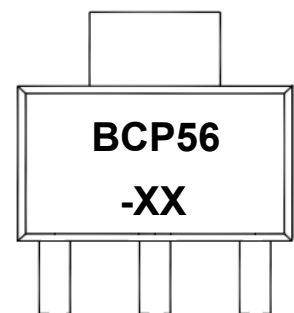


SOT-223



1.Base 2.Collector 3. Emitter

Marking Code :



Note: The "X" is variable
BCP56ST-10=BCP56 -10
BCP56ST-16=BCP56 -16

Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

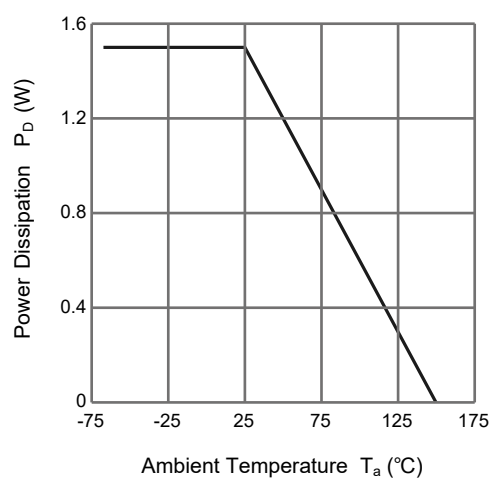
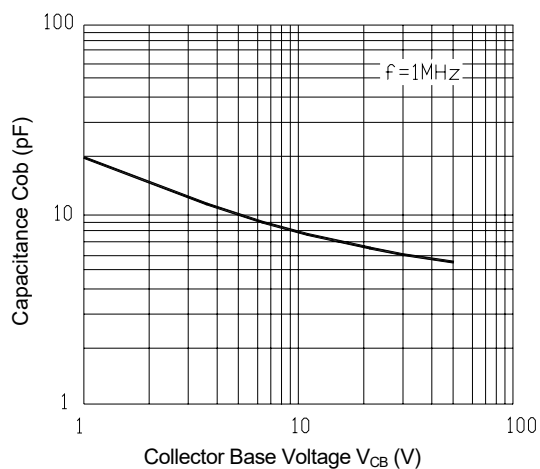
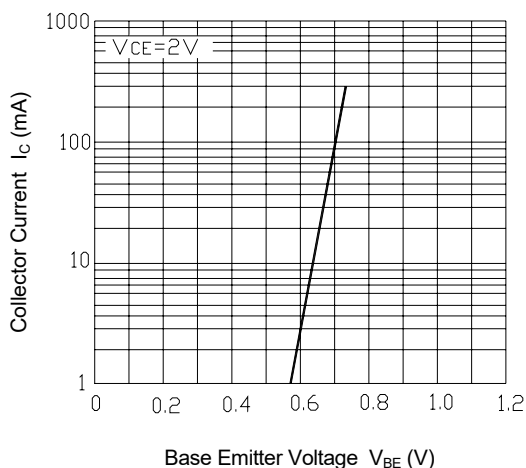
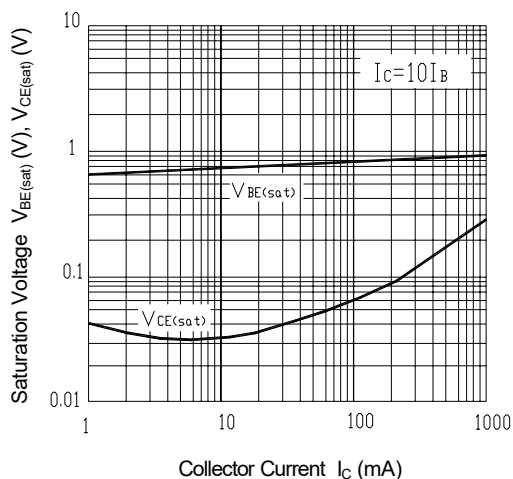
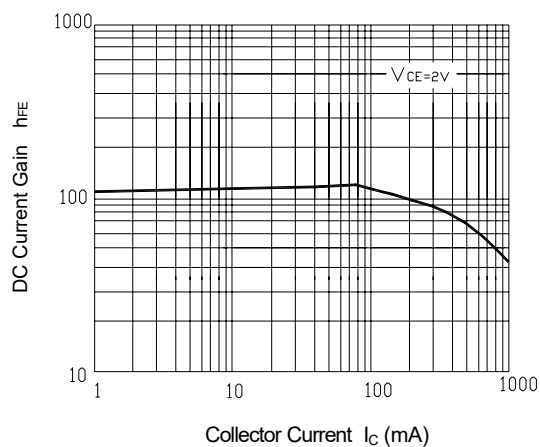
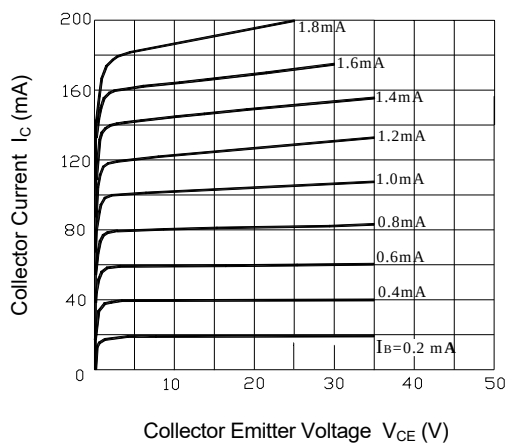
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	100	V
Collector Emitter Voltage	V_{CEO}	80	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Peak Collector Current	I_{CM}	1.5	A
Maximum Power Dissipation	P_D	1.5	W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C



Electrical Characteristics (T_A=25°C)

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at V _{CE} = 2 V, I _C = 5 mA			40	--	--	
at V _{CE} = 2 V, I _C = 150 mA	-10	H _{FE}	63	--	160	--
Gain Group	-16		100	--	250	
at V _{CE} = 2 V, I _C = 500 mA			25	--	--	
Collector Base Cutoff Current		I _{CBO}	--	--	100	nA
at V _{CB} = 30V						
Emitter Base Cutoff Current		I _{EBO}	--	--	100	nA
at V _{EB} = 5 V						
Collector Base Breakdown Voltage		V _{(BR)CBO}	100	--	--	V
at I _C = 100 μA						
Collector Emitter Breakdown Voltage		V _{(BR)CEO}	80	--	--	V
at I _C = 1 mA						
Emitter Base Breakdown Voltage		V _{(BR)EBO}	5	--	--	V
at I _E = 100 μA						
Collector Emitter Saturation Voltage		V _{CE(sat)}	--	--	0.5	V
at I _C = 500 mA, I _B = 50 mA						
Base Emitter On Voltage		V _{BE(on)}	--	--	1	V
at V _{CE} = 2 V, I _C = 500 mA						
Transition Frequency		f _T	100	--	--	MHz
at V _{CE} = 5 V, I _C = 50 mA, f = 100 MHz						
Output Capacitance		C _{ob}	--	6	--	pF
at V _{CB} = 10 V, f = 1 MHz						

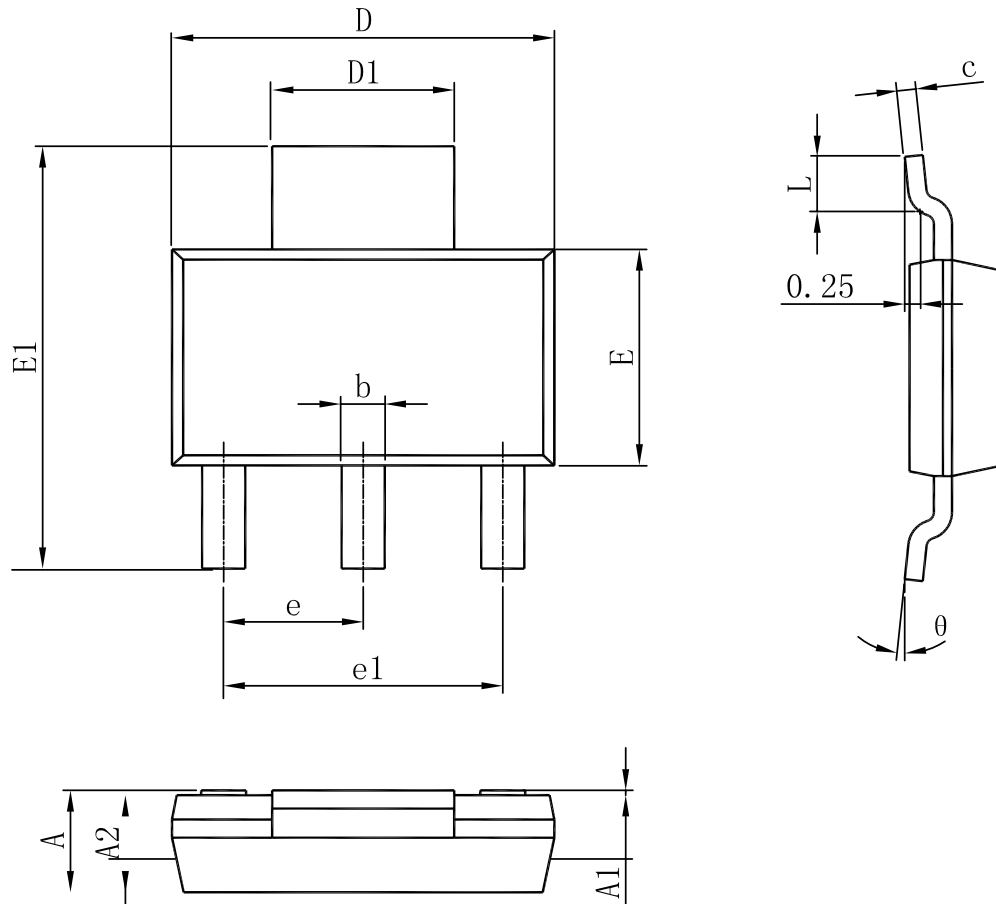
Typical Characteristic Curves



Package Outline

SOT-223

Dimensions in mm



1. 塑脂体无缺损、缩孔、气泡、裂纹等缺陷；
2. 树脂体上下部XY方向偏差、树脂体中心与引线框中心错位 ± 0.035 ；
3. 粗糙度Ra为0.4--0.6。

Symbol	Dimensions In Millimeters		
	MIN	NOM	MAX
A	/	/	1.80
A1	0.02	/	0.10
A2	1.50	1.60	1.70
b	0.66	0.71	0.84
c	0.23	0.30	0.35
D	6.30	6.50	6.70
D1	2.90	3.00	3.10
E	3.30	3.50	3.70
E1	6.70	7.00	7.30
e	2.30 BASIC		
e1	4.60 BASIC		
L	0.75	/	/
θ	0°	/	10°