

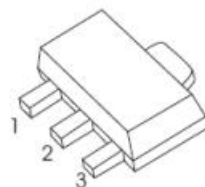


SOT-89 Bipolar Transistor 双极型三极管

■ Features 特点

NPN High Voltage 高压

1. BASE
2. COLLECTOR
3. EMITTER



■ Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Collector-Base Voltage 集电极基极电压	V_{CBO}	310	V
Collector-Emitter Voltage 集电极发射极电压	V_{CEO}	305	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	5	V
Collector Current 集电极电流	I_C	200	mA
Collector Current Pulsed 集电极脉冲电流	I_{CP}	500	mA
Power dissipation 耗散功率	$P_C(T_a=25^\circ\text{C})$	500	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	250	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^\circ\text{C}$	

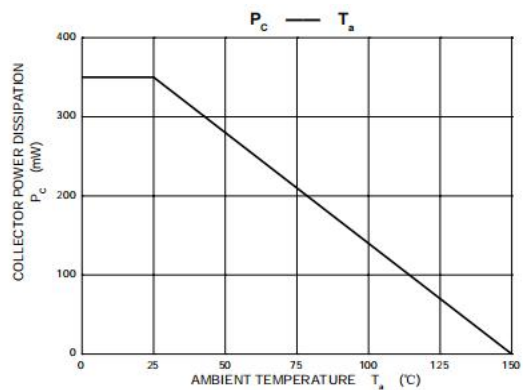
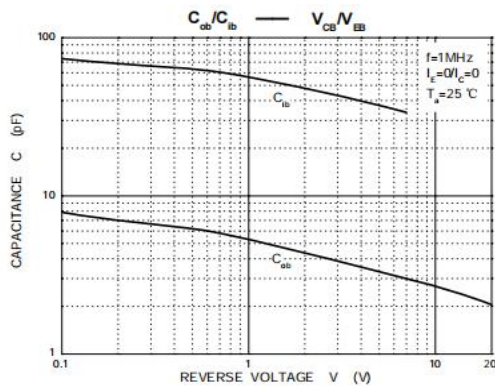
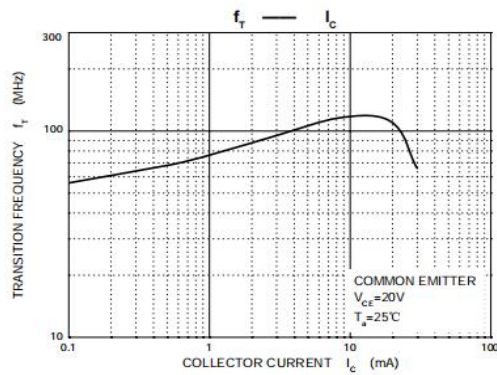
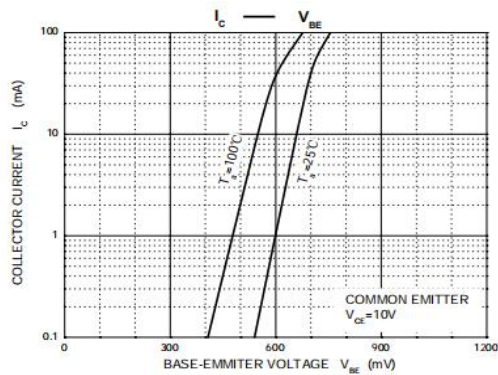
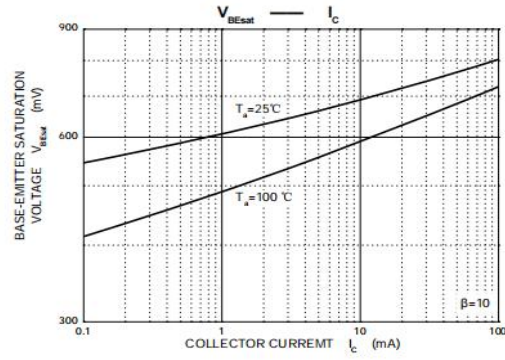
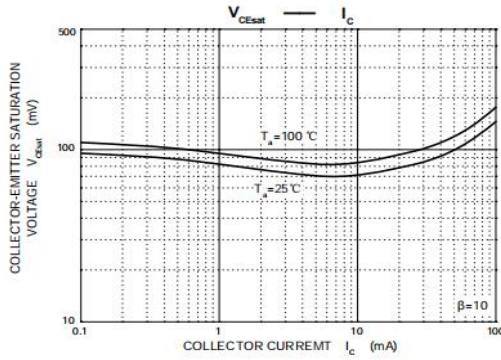
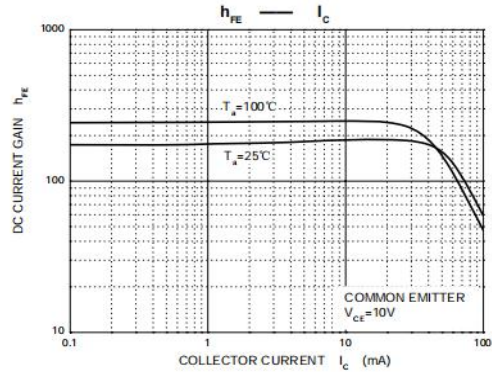
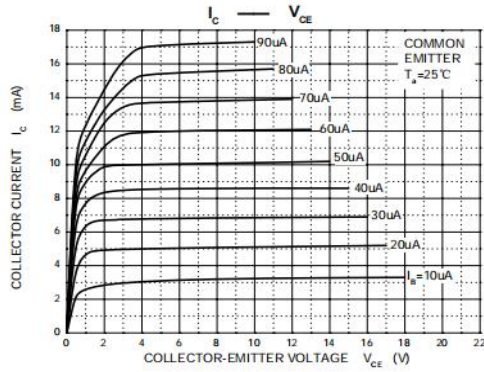


■ Electrical Characteristics 电特性

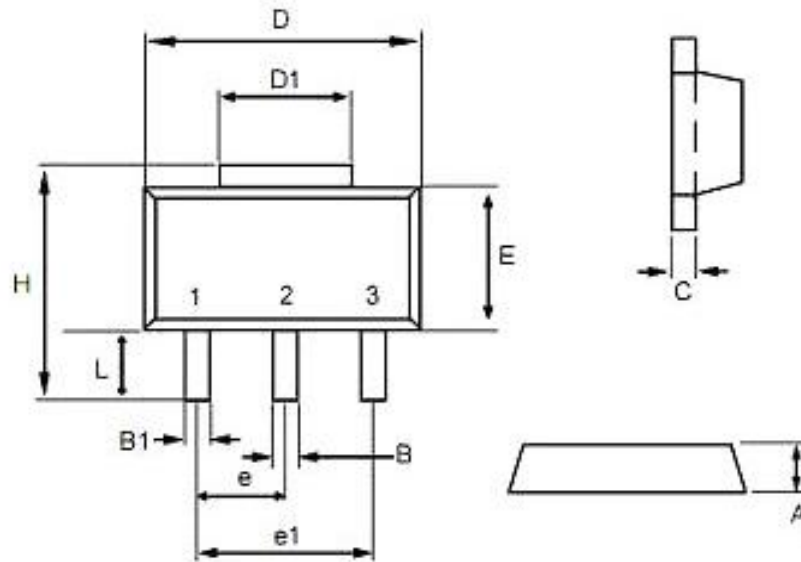
(TA=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	Min 最小值	Type 典型值	Max 最大值	Unit 单位
Collector-Base Breakdown Voltage 集电极基极击穿电压(I _C =100uA, I _E =0)	BV _{CBO}	310	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压(I _C =1mA, I _B =0)	BV _{CEO}	305	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压(I _E =100uA, I _C =0)	BV _{EBO}	5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流(V _{CB} =300V, I _E =0)	I _{CBO}	—	—	100	nA
Collector-Emitter Leakage Current 集电极发射极漏电流(V _{CE} =200V, I _B =0)	I _{CEO}	—	—	100	nA
Emitter-Base Leakage Current 发射极基极漏电流(V _{EB} =5V, I _C =0)	I _{EBO}	—	—	100	nA
DC Current Gain 直流电流增益(V _{CE} =10V, I _C =1mA)	H _{FE} (1)	60	—	—	
DC Current Gain 直流电流增益(V _{CE} =10V, I _C =10mA)	H _{FE} (2)	100	—	200	
DC Current Gain 直流电流增益(V _{CE} =10V, I _C =30mA)	H _{FE} (3)	60	—	—	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降(I _C =20mA, I _B =2mA)	V _{CE(sat)}	—	—	0.2	V
Base-Emitter Saturation Voltage 基极发射极饱和压降(I _C =20mA, I _B =2mA)	V _{BE(sat)}	—	—	0.9	V
Transition Frequency 特征频率(V _{CE} =20V, I _C =10mA)	f _T	50	—	—	MHz
Output Capacitance 输出电容(V _{CB} =20V, I _E =0, f=1MHz)	C _{ob}	—	6	—	pF

Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



Dim	min	max
A	1.40	1.60
B	0.40	0.56
B1	0.35	0.48
C	0.35	0.44
D	4.40	4.60
D1	1.35	1.83
e	1.50 BSC	
e1	3.00 BSC	
E	2.29	2.60
H	3.75	4.25
L	0.80	1.20