

TO-92 Bipolar Transistor 双极型三极管

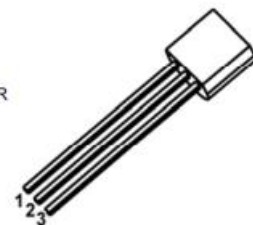
■ **Features 特点**

PNP General Purpose 通用

■ **Absolute Maximum Ratings 最大额定值**

TO-92

- 1.EMITTER
- 2.COLLECTOR
- 3.BASE



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}	-50	V
Collector-Emitter Voltage 集电极发射极电压	V_{CEO}	-50	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	-5	V
Collector Current 集电极电流	I_C	-150	mA
Power dissipation 耗散功率	$P_C(T_a=25^\circ\text{C})$	400	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	313	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^\circ\text{C}$	

■ **Device Rank 产品分档**

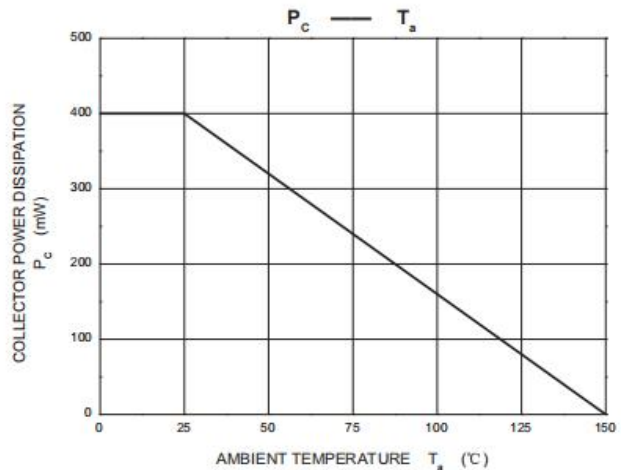
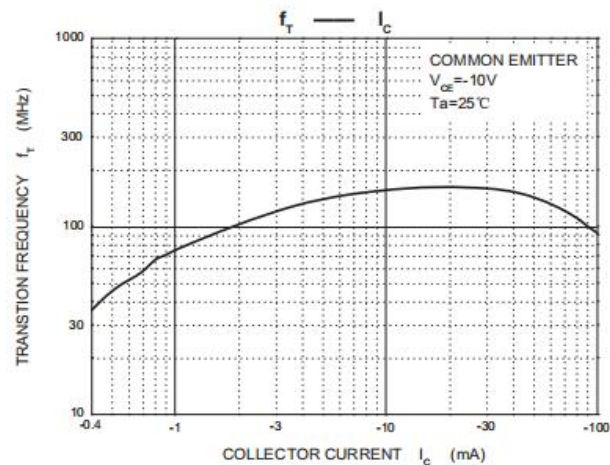
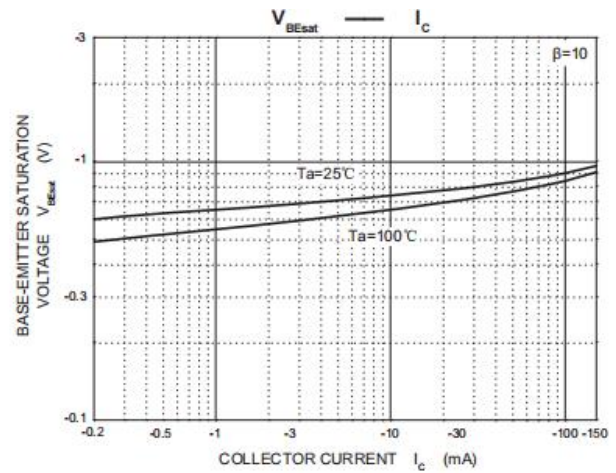
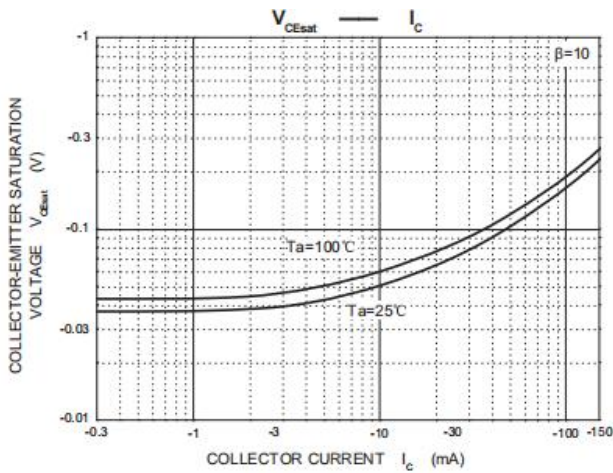
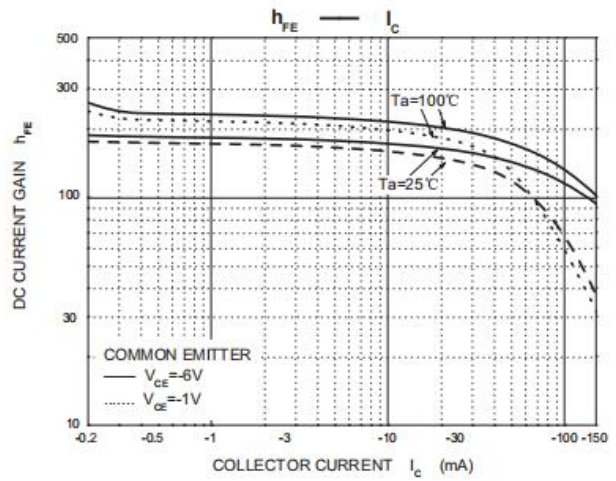
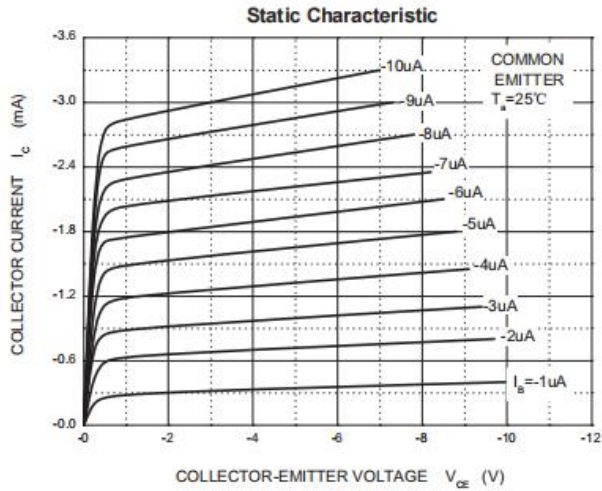
Rank 档位	O	Y	GR	BL
H_{FE} Range	70-140	120-240	200-400	350-700

■ Electrical Characteristics 电特性

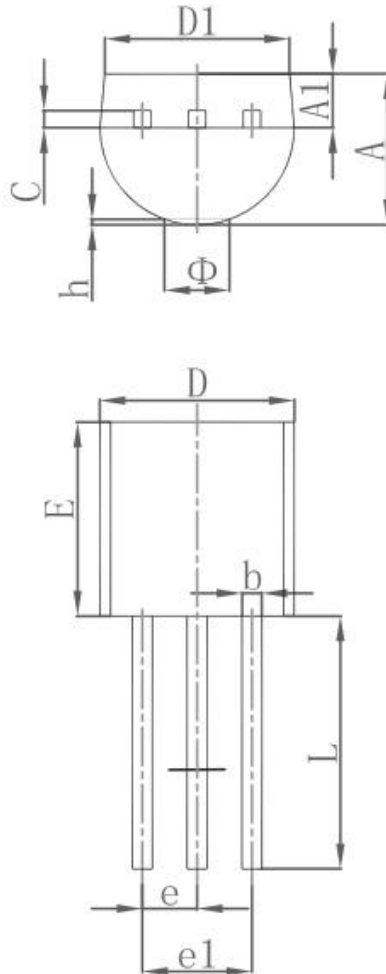
(T_A=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

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}	-50	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压 (I _C = -1mA, I _B =0)	BV _{CEO}	-50	—	—	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} = -60V, I _E =0)	I _{CBO}	—	—	-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} = -6V, I _C = -2mA)	H _{FE}	70	—	700	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降 (I _C = -100mA, I _B = -10mA)	V _{CE(sat)}	—	—	-0.3	V
Base-Emitter Saturation Voltage 基极发射极饱和压降 (I _C = -100mA, I _B = -10mA)	V _{BE(sat)}	—	—	-1.1	V
Transition Frequency 特征频率 (V _{CE} = -10V, I _C = -1mA)	f _T	80	—	—	MHz
Noise Figure 噪声系数 (V _{CE} = -6V, I _C = -0.1mA, f=1KHz)	NF	—	—	6	dB
Output Capacitance 输出电容 (V _{CB} = -6V, I _E =0, f=1MHz)	C _{ob}	—	—	7	pF

■ Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015