

SOT-23-3L Bipolar Transistor 双极型三极管

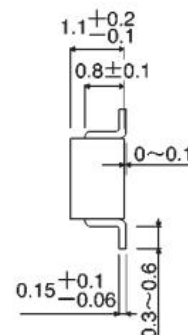
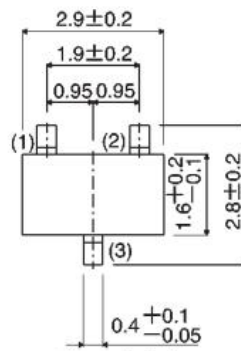
■ Features 特点

1、Emitter

2、Base

3、Collector

NPN High Voltage 高压



■ 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}	160	V
Collector-Emitter Voltage 集电极发射极电压	V_{CEO}	160	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	6	V
Collector Current 集电极电流	I_C	1000	mA
Power dissipation 耗散功率	$P_C(T_a=25^{\circ}C)$	250	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	500	$^{\circ}C/W$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^{\circ}C$	

■ Device Marking 产品打标

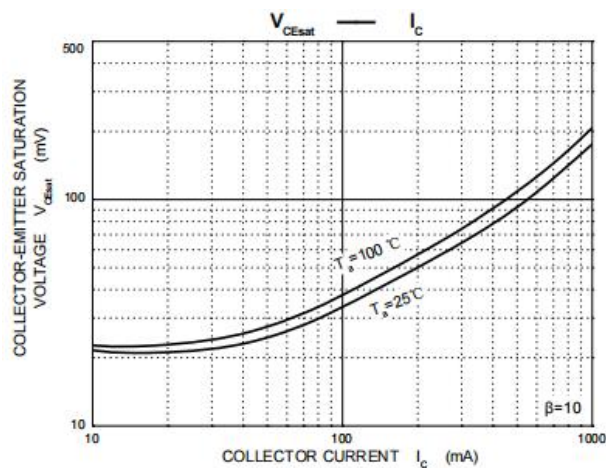
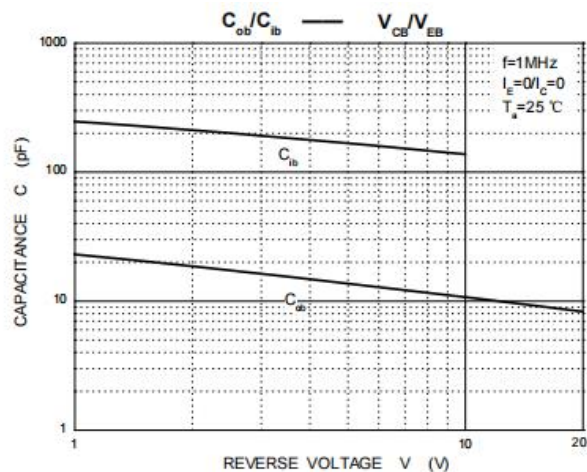
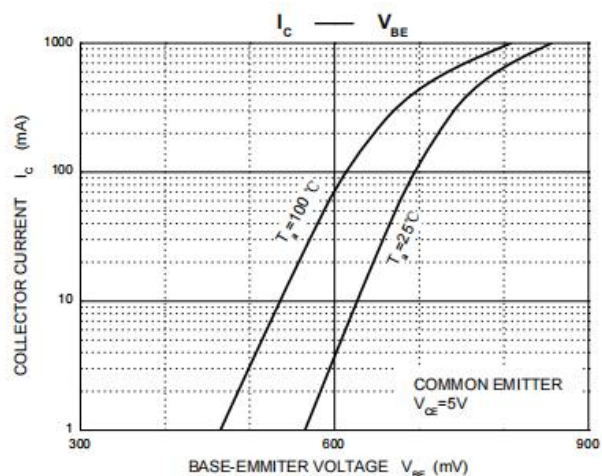
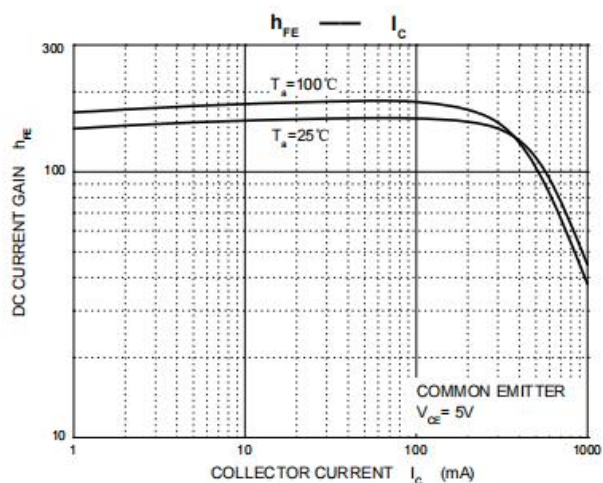
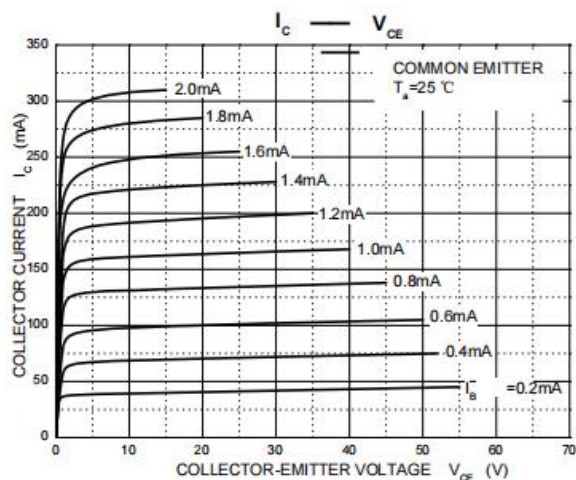
$H_{FE}(1)$	60-120(R)	100-200(O)	160-320(Y)
Mark	2383		

■Electrical Characteristics 电特性

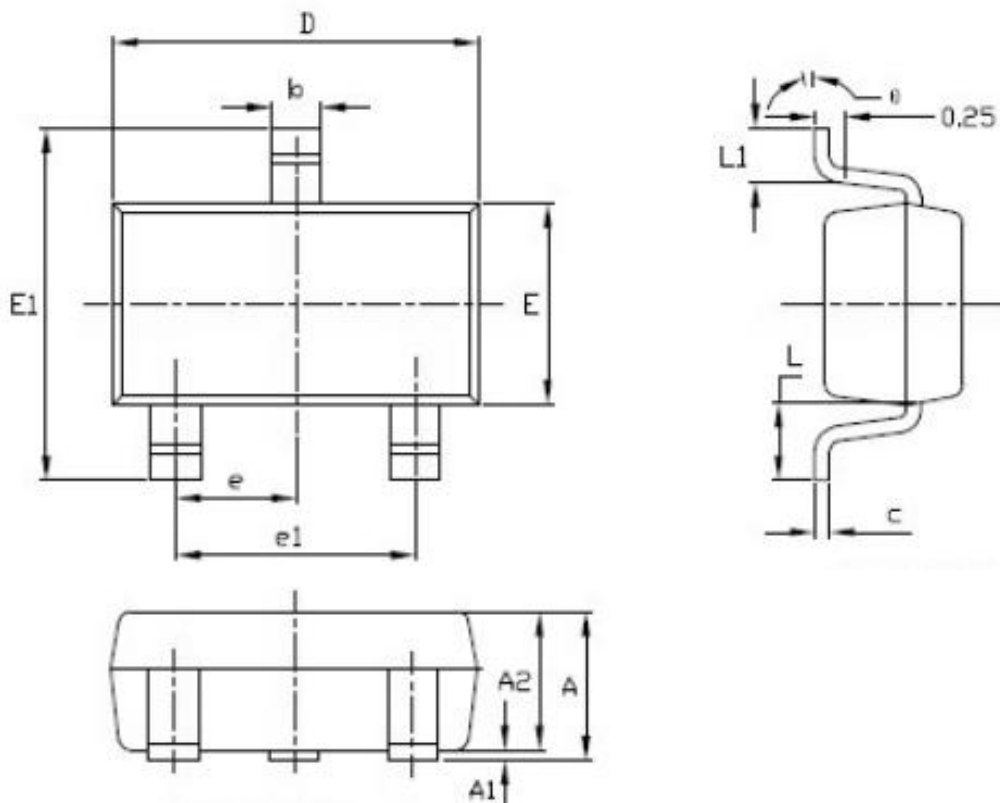
(TA=25℃ unless otherwise noted 如无特殊说明, 温度为 25℃)

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(IC=100uA, IE=0)	BV _{CBO}	160	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压(IC=1mA, IB=0)	BV _{CEO}	160	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压(IE=10uA, IC=0)	BV _{EBO}	6	—	—	V
Collector-Base Leakage Current 集电极基极漏电流(V _{CB} =150V, IE=0)	I _{CBO}	—	—	1	μA
Emitter-Base Leakage Current 发射极基极漏电流(V _{EB} =6V, IC=0)	I _{EBO}	—	—	1	μA
DC Current Gain 直流电流增益(V _{CE} =5V, IC=200mA)	H _{FE} (1)	60	—	320	
DC Current Gain 直流电流增益(V _{CE} =5V, IC=10mA)	H _{FE} (2)	40	—	—	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降(IC=500mA, IB=50mA)	V _{CE(sat)}	—	—	0.75	V
Base-Emitter Saturation Voltage 基极发射极饱和压降(IC=500mA, IB=50mA)	V _{BE(sat)}	—	—	1.5	V
Base-Emitter On Voltage 基极发射极导通电压(V _{CE} =5V, IC=5mA)	V _{BE}	—	—	0.75	V
Transition Frequency 特征频率(V _{CE} =5V, IC=200mA)	f _T	20	—	—	MHz
Output Capacitance 输出电容(V _{CB} = 5V, IE=0, f=1MHz)	C _{ob}	—	12	—	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	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.600REF		0.024REF	
L1	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°