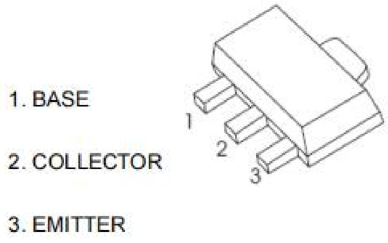
SOT-89-3L Bipolar Transistor 双极型三极管



■Features 特点

PNP High Speed Switching 高速开关
Low Saturation Voltage 低饱和压降

■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}	-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	-2000	mA
Power dissipation 耗散功率	$P_C(T_a=25℃)$	500	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\Theta JA}$	250	℃/W
Junction and Storage Temperature 结温和储藏温度	T_J,T_{stg}	-55to+150℃	

■Device Marking 产品打标

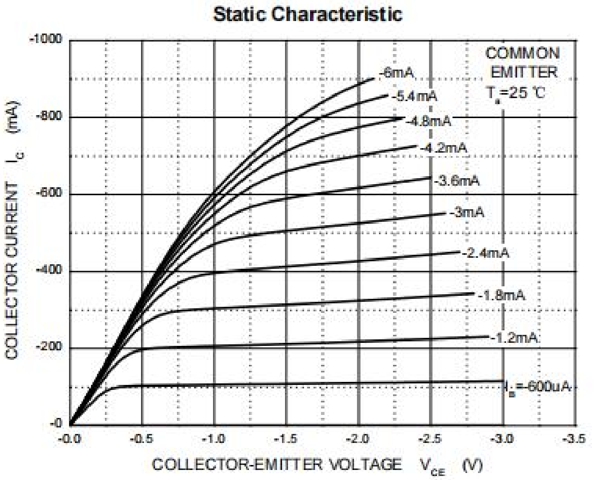
H_{FE}	70-140(O)	120-240(Y)
Mark	NO	NY

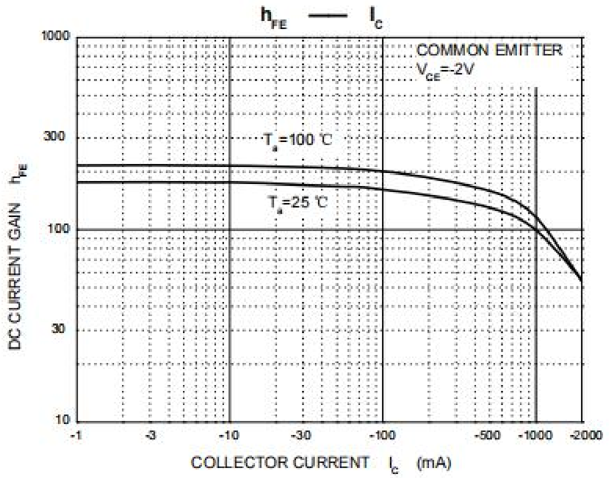
■Electrical Characteristics 电特性

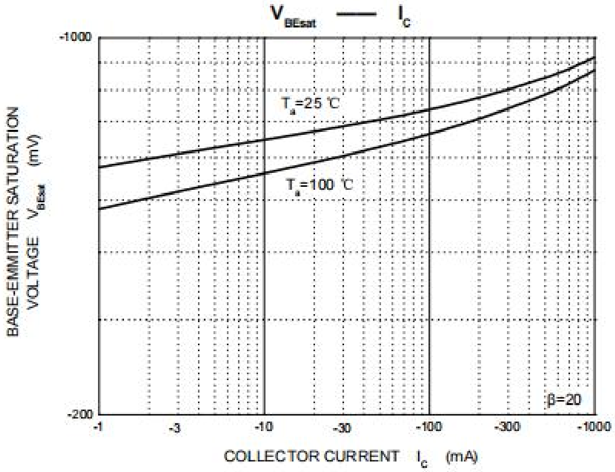
(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

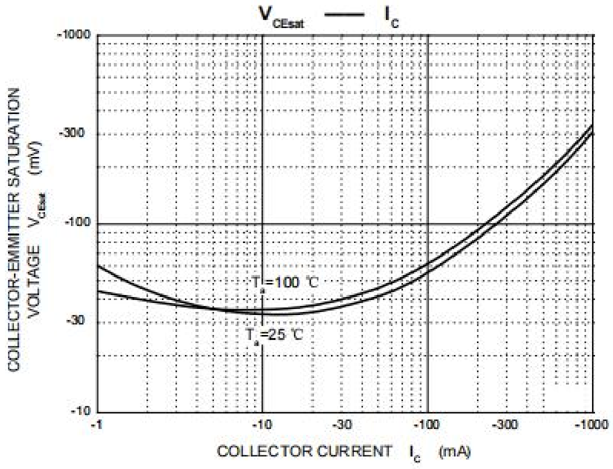
Characteristic 特性参数	Symbol 符号	Min 最小值	Type 典型值	Max 最大值	Unit 单位
Collector-Base Breakdown Voltage 集电极基极击穿电压(I_C= -100μA，I_E=0)	BV_{CBO}	-50	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压(I_C= -1mA，I_B=0)	BV_{CEO}	-50	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压(I_E= -100μA，I_C=0)	BV_{EBO}	-5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流(V_{CB}= -50V，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(V_{CE}= -2V，I_C= -500mA) 直流电流增益(V_{CE}= -2V，I_C= -2000mA)	H_{FE}	70 20	—	240	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降(I_C= -1000mA，I_B= -50mA)	$V_{CE(sat)}$	—	—	-500	mV
Base-Emitter Saturation Voltage 基极发射极饱和压降(I_C= -1000mA，I_B= -50mA)	$V_{BE(sat)}$	—	—	-1200	mV
Turn-on Time 开通时间 (V_{CC}= -50V,I_C= -700mA,I_{B1}= -I_{B2}= -70mA)	t_{on}	—	80	—	ns
Storage Time 贮存时间 (V_{CC}= -50V,I_C= -700mA,I_{B1}= -I_{B2}= -70mA)	t_s	—	750	—	ns
Fall Time 下降时间 (V_{CC}= -50V,I_C= -700mA,I_{B1}= -I_{B2}= -70mA)	t_f	—	40	—	ns
Transition Frequency 特征频率(V_{CE}= -2V，I_C= -500mA)	f_T	—	100	—	MHz
Output Capacitance 输出电容(V_{CB}= -10V，I_E=0, f=1MHz)	C_{ob}	—	40	—	pF

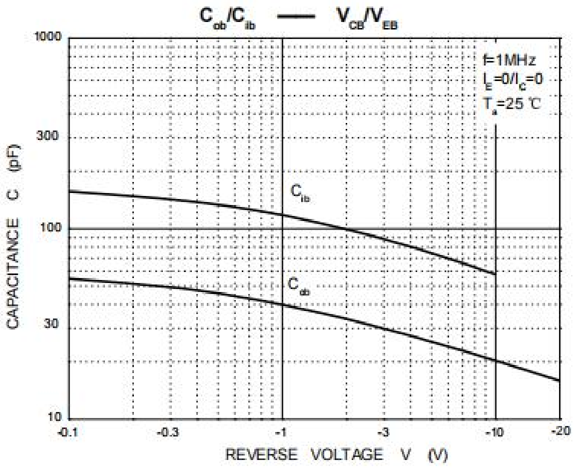
■Typical Characteristic Curve 典型特性曲线

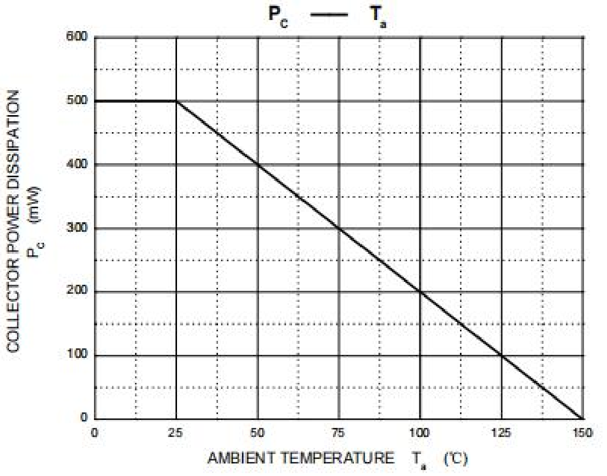




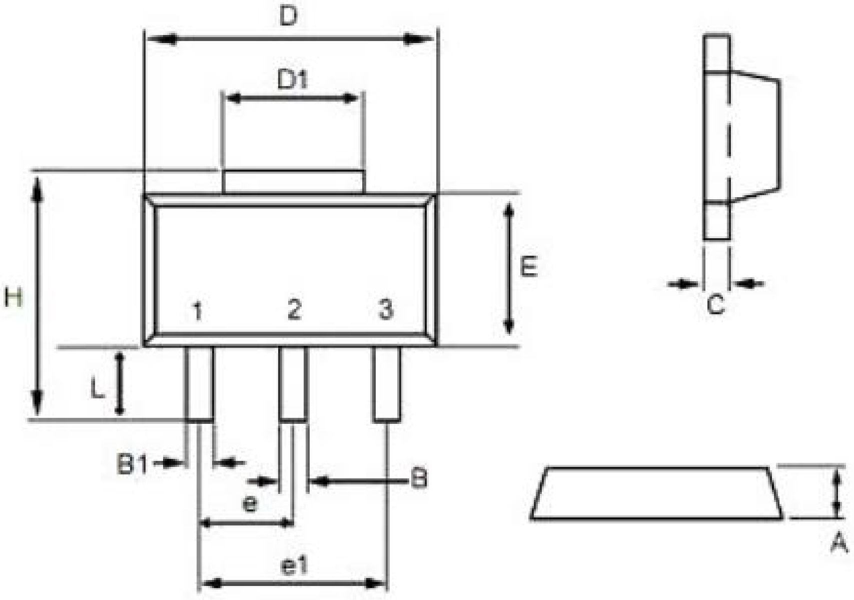








■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.40	1.60	0.055	0.063
B	0.40	0.56	0.016	0.022
B1	0.35	0.48	0.014	0.019
C	0.35	0.44	0.014	0.017
D	4.40	4.60	0.173	0.181
D1	1.35	1.83	0.053	0.072
e	1.45	1.55	0.057	0.061
e1	2.95	3.05	0.116	0.120
E	2.29	2.60	0.090	0.102
H	3.75	4.25	0.148	0.167
L	0.80	1.20	0.031	0.047