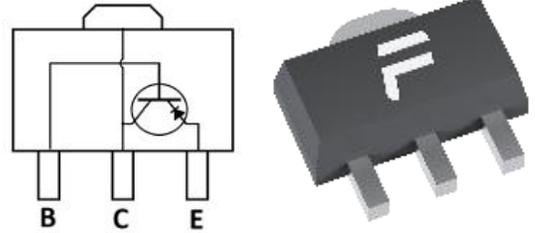


**SOT-89-3L Bipolar Transistor 双极型三极管**

■ 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	$P_C(T_a=25^\circ\text{C})$	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 $^\circ\text{C}$	

■ Device Marking 产品打标

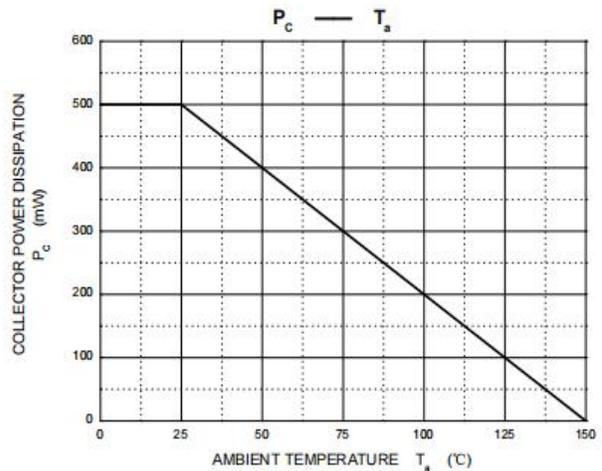
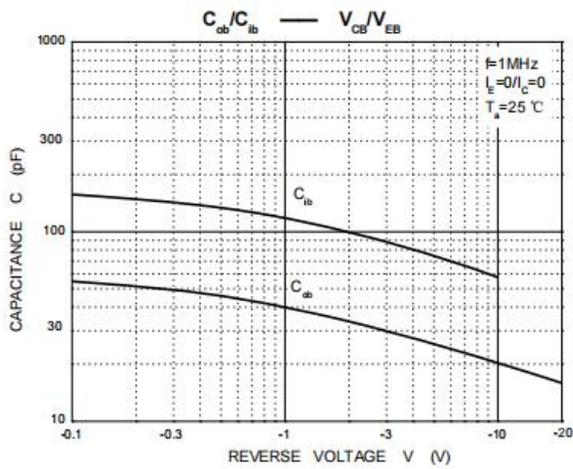
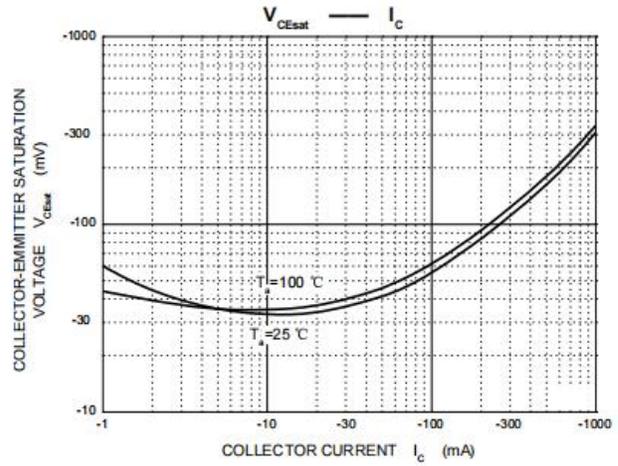
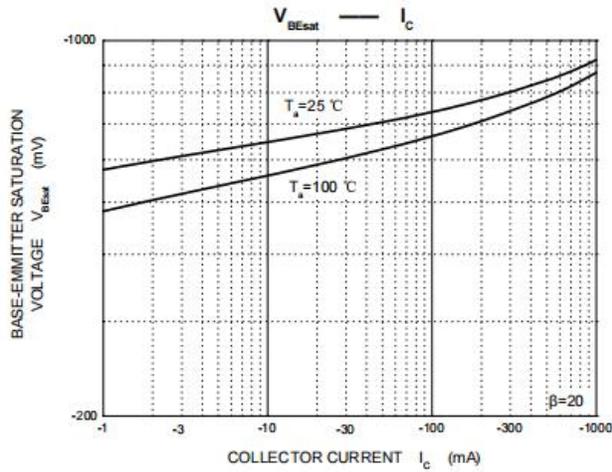
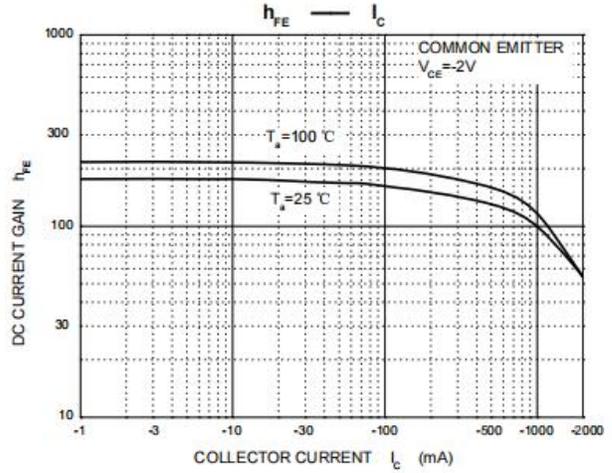
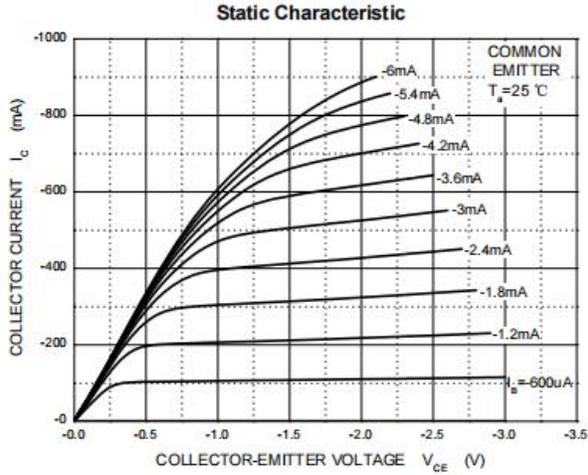
$H_{FE}$	70-140(O)	120-240(Y)
Mark	NO	NY

**■Electrical Characteristics 电特性**

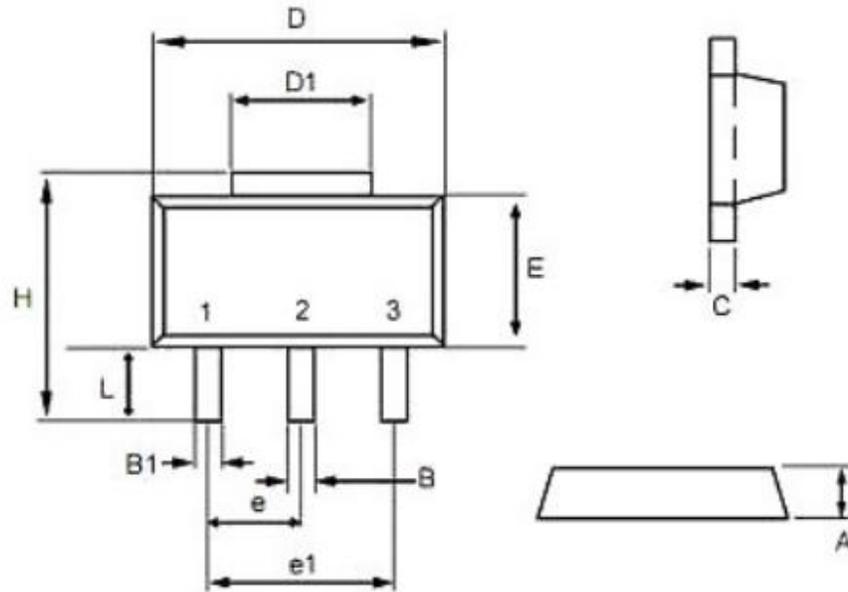
(TA=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

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 <sub>C</sub> = -100μA, I <sub>E</sub> =0)	BV <sub>CBO</sub>	-50	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压(I <sub>C</sub> = -1mA, I <sub>B</sub> =0)	BV <sub>CEO</sub>	-50	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压(I <sub>E</sub> = -100μA, I <sub>C</sub> =0)	BV <sub>EBO</sub>	-5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流(V <sub>CB</sub> = -50V, I <sub>E</sub> =0)	I <sub>CBO</sub>	—	—	-100	nA
Emitter-Base Leakage Current 发射极基极漏电流(V <sub>EB</sub> = -5V, I <sub>C</sub> =0)	I <sub>EBO</sub>	—	—	-100	nA
DC Current Gain(V <sub>CE</sub> = -2V, I <sub>C</sub> = -500mA) 直流电流增益(V <sub>CE</sub> = -2V, I <sub>C</sub> = -2000mA)	H <sub>FE</sub>	70 20	—	240	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降(I <sub>C</sub> = -1000mA, I <sub>B</sub> = -50mA)	V <sub>CE(sat)</sub>	—	—	-500	mV
Base-Emitter Saturation Voltage 基极发射极饱和压降(I <sub>C</sub> = -1000mA, I <sub>B</sub> = -50mA)	V <sub>BE(sat)</sub>	—	—	-1200	mV
Turn-on Time 开通时间 (V <sub>CC</sub> = -50V, I <sub>C</sub> = -700mA, I <sub>B1</sub> = -I <sub>B2</sub> = -70mA)	t <sub>on</sub>	—	80	—	ns
Storage Time 贮存时间 (V <sub>CC</sub> = -50V, I <sub>C</sub> = -700mA, I <sub>B1</sub> = -I <sub>B2</sub> = -70mA)	t <sub>s</sub>	—	750	—	ns
Fall Time 下降时间 (V <sub>CC</sub> = -50V, I <sub>C</sub> = -700mA, I <sub>B1</sub> = -I <sub>B2</sub> = -70mA)	t <sub>f</sub>	—	40	—	ns
Transition Frequency 特征频率(V <sub>CE</sub> = -2V, I <sub>C</sub> = -500mA)	f <sub>T</sub>	—	100	—	MHz
Output Capacitance 输出电容(V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1MHz)	C <sub>ob</sub>	—	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