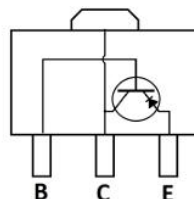


SOT-89-3L Bipolar Transistor 双极型三极管

■ Features 特点

HF **RoHS** **Pb**

PNP General Purpose 通用



■ Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号	BCX51/ -10/-1-2 AF	BCX52/ -10/-16 -2AF	BCX53/ -10/-16 -2AF	Unit 单位
Collector-Base Voltage 集电极基极电压	V_{CBO}	-45	-60	-100	V
Collector-Emitter Voltage 集电极发射极电压	V_{CEO}	-45	-60	-80	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	-5			V
Collector Current 集电极电流	I_C	-1000			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

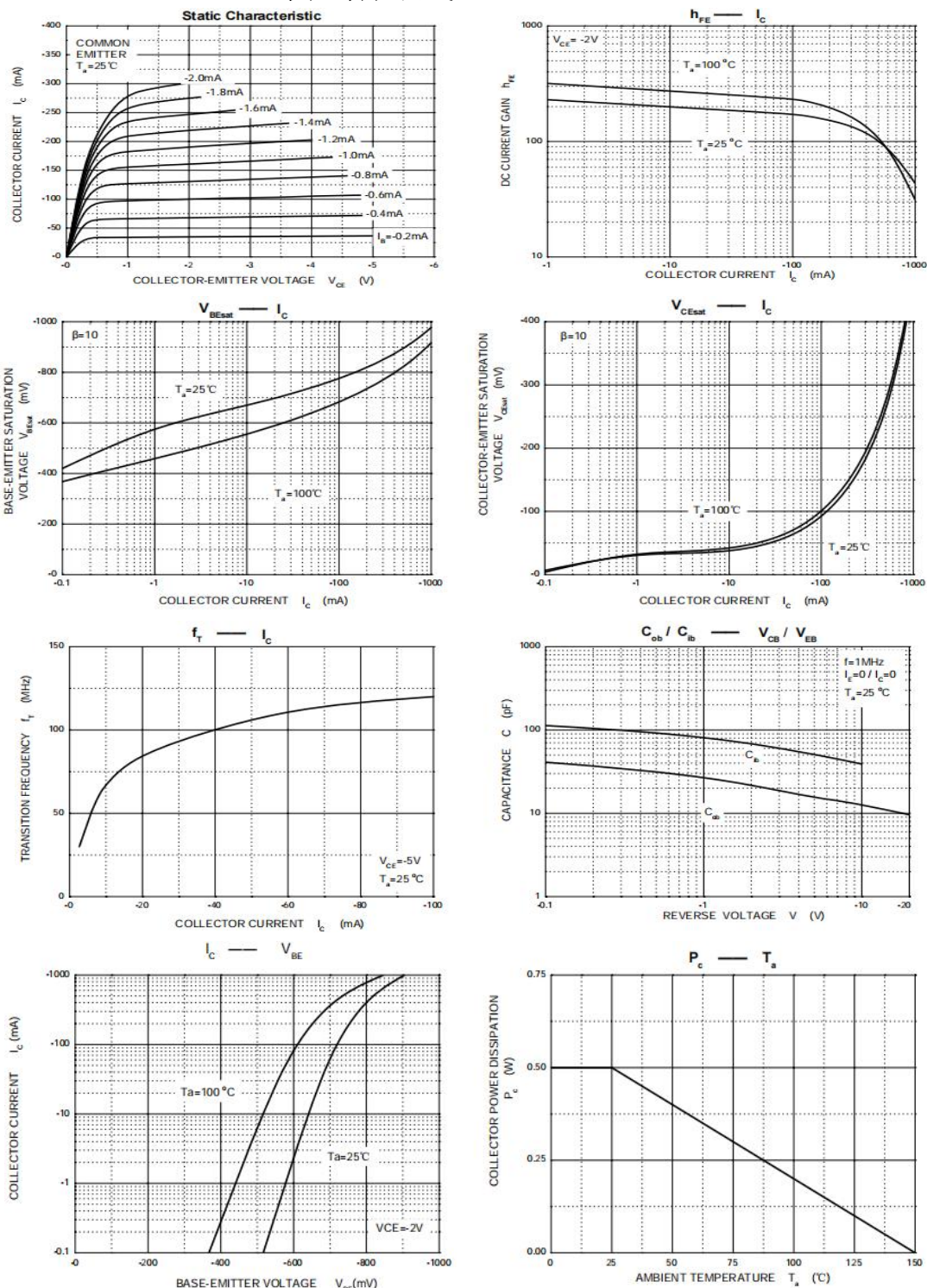
$H_{FE}(2)$		63-250(-2AF)	63-160(-10-2AF)	100-250(-16-2AF)
Mark	BCX51	AA	AC	AD
	BCX52	AE	AG	AM
	BCX53	AH	AK	AL

■Electrical Characteristics 电特性

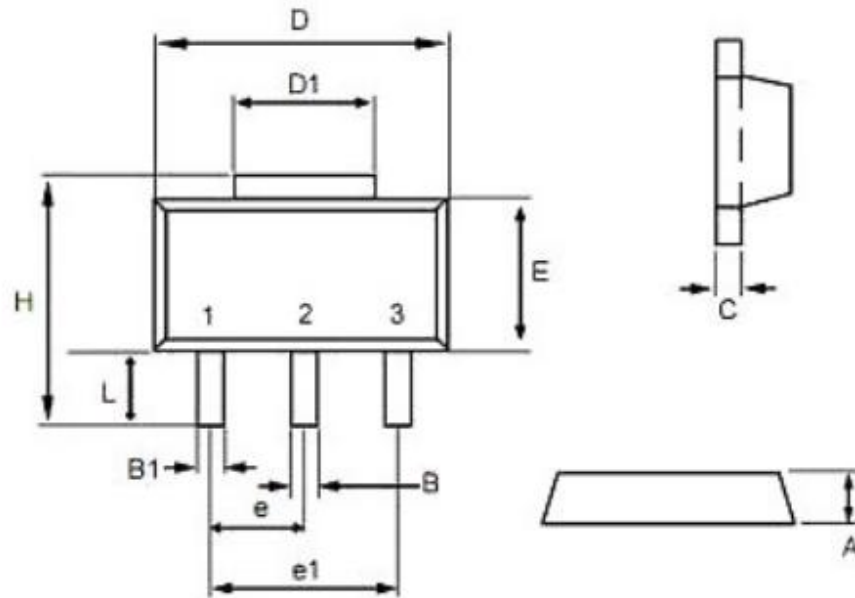
 (T_A=25℃ unless otherwise noted 如无特殊说明, 温度为 25℃)

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 = -100uA, I _E =0)	BCX51/-10/-16-2AF	BV _{CBO}	-45	—	—	V
	BCX52/-10/-16-2AF		-60			
	BCX53/-10/-16-2AF		-100			
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压 (I _C = -10mA, I _B =0)	BCX51/-10/-16-2AF	BV _{CEO}	-45	—	—	V
	BCX52/-10/-16-2AF		-60			
	BCX53/-10/-16-2AF		-80			
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	BCX51/-10/-16-2AF (V _{CB} = -30V, I _E =0)	I _{CBO}	—	—	-100	nA
	BCX52/-10/-16-2AF (V _{CB} = -50V, I _E =0)					
	BCX53/-10/-16-2AF (V _{CB} = -80V, I _E =0)					
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} = -2V, I _C = -5mA)		H _{FE} (1)	63	—	—	
DC Current Gain 直流电流增益 (V _{CE} = -2V, I _C = -0.15A)	BCX51/BCX52/BCX53-2AF	H _{FE} (2)	63	—	250	
	BCX51/BCX52/BCX53-10-2AF		63		160	
	BCX51/BCX52/BCX53-16-2AF		100		250	
DC Current Gain 直流电流增益(V _{CE} = -2V, I _C = -0.5A)		H _{FE} (3)	40	—	—	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降(I _C = -0.5A, I _B = -50mA)		V _{CE(sat)}	—	—	-0.5	V
Base-Emitter Saturation Voltage 基极发射极饱和压降(I _C = -500mA, I _B = -50mA)		V _{BE(sat)}	—	—	-1	V
Base-Emitter On Voltage 基极发射极导通电压(V _{CE} = -2V, I _C = -0.5A)		V _{BE(on)}	—	—	-1	V
Transition Frequency 特征频率(V _{CE} = -5V, I _C = -10mA)		f _T	—	50	—	MHz
Output Capacitance 输出电容(V _{CB} = -10V, I _E =0, f=1MHz)		C _{ob}	—	15	—	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