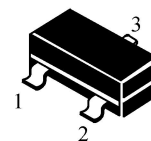


SOT-323 Bipolar Transistor 双极型三极管

■ **Features 特点**

PNP General Purpose 通用

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



■ **Absolute Maximum Ratings 最大额定值**

Characteristic 特性参数	Symbol 符号	BC807W- 16/25/40	BC808W- 16/25/40	Unit 单位
Collector-Base Voltage 集电极基极电压	V_{CBO}	-50	-30	V
Collector-Emitter Voltage 集电极发射极电压	V_{CEO}	-45	-25	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	-5	-5	V
Collector Current 集电极电流	I_C	-500	-800	mA
Power dissipation 耗散功率	$P_C(T_a=25^\circ\text{C})$	300		mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	417		$^\circ\text{C}/\text{W}$
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**

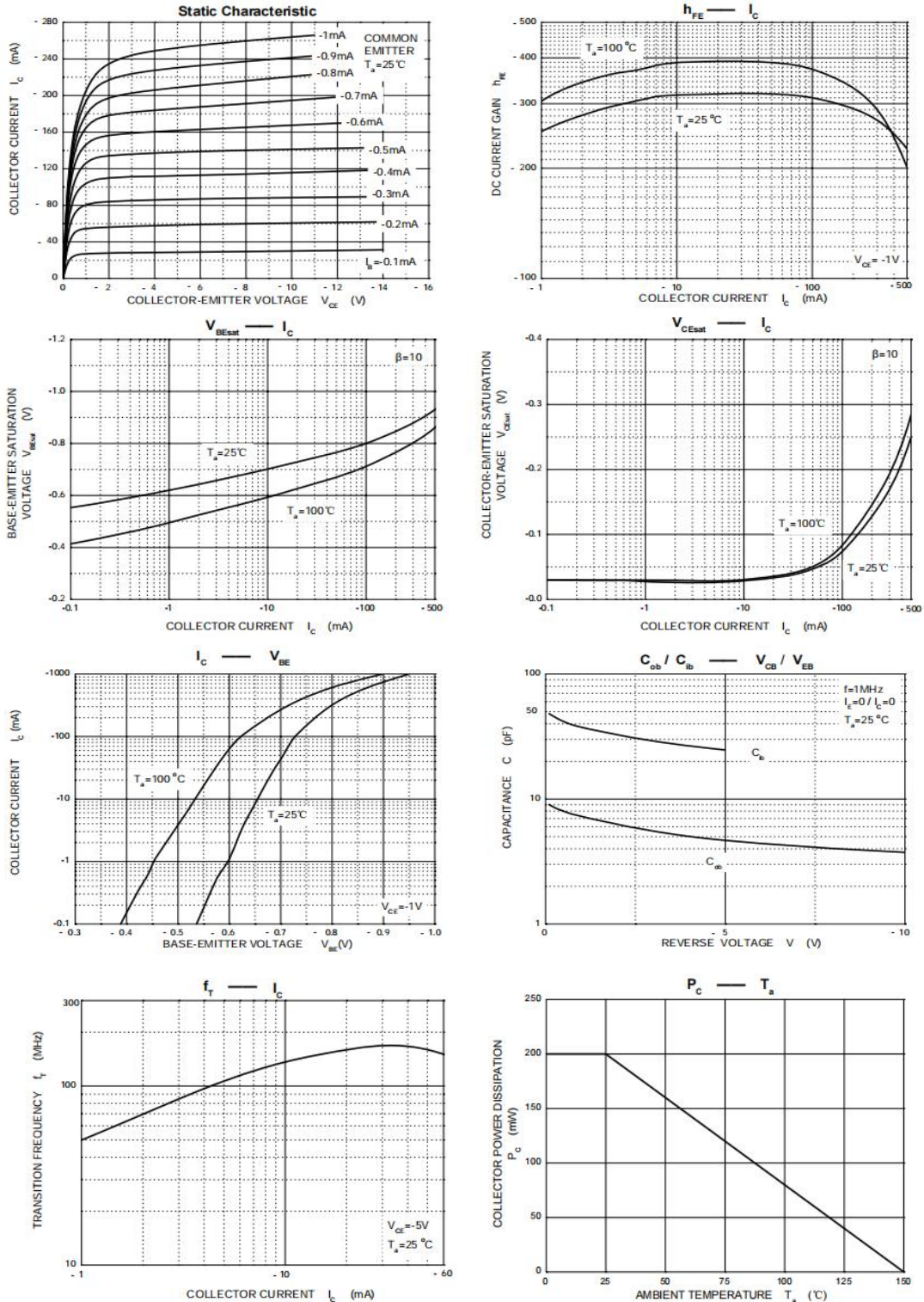
H_{FE}		100-250(-16)	160-400(-25)	250-600(-40)
Mark	BC807W	5A	5B	5C
	BC808W	5E	5F	5G

■ Electrical Characteristics 电特性

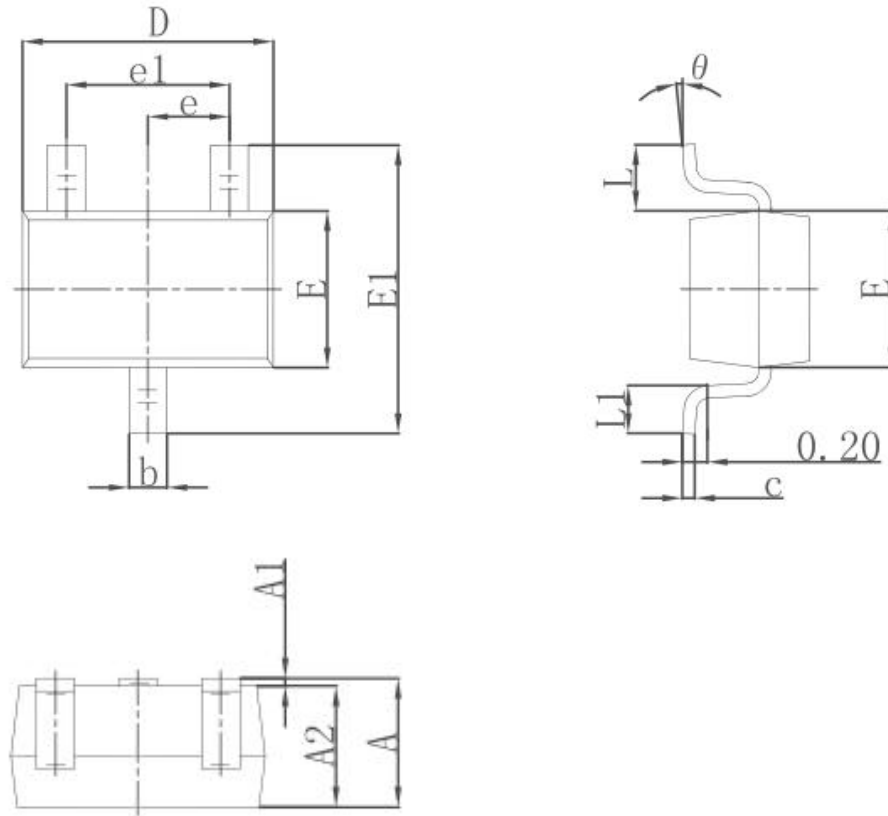
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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 ($I_C=-10\mu\text{A}$, $I_E=0$)	BC807W-16/25/40 BC808W-16/25/40	BV_{CBO}	-50 -30	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压 ($I_C=-10\text{mA}$, $I_B=0$)	BC807W-16/25/40 BC808W-16/25/40	BV_{CEO}	-45 -25	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压 ($I_E=-10\mu\text{A}$, $I_C=0$)		BV_{EBO}	-5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流	BC807W-16/25/40 ($V_{CB}=-50\text{V}$, $I_E=0$) BC808W-16/25/40 ($V_{CB}=-30\text{V}$, $I_E=0$)	I_{CBO}	—	—	-100	nA
Emitter-Base Leakage Current 发射极基极漏电流 ($V_{EB}=-4\text{V}$, $I_C=0$)		I_{EBO}	—	—	-100	nA
DC Current Gain 直流电流增益 ($V_{CE}=-1\text{V}$, $I_C=-100\text{mA}$)	BC807W-16/BC808W-16 BC807W-25/BC808W-25 BC807W-40/BC808W-40	H_{FE}	100 160 250	—	250 400 600	
DC Current Gain 直流电流增益($V_{CE}=-1\text{V}$, $I_C=-500\text{mA}$)		H_{FE}	40			
Collector-Emitter Saturation Voltage 集电极发射极饱和压降($I_C=-500\text{mA}$, $I_B=-50\text{mA}$)		$V_{CE(sat)}$	—	—	-0.7	V
Base-Emitter Saturation Voltage 基极发射极饱和压降($I_C=-500\text{mA}$, $I_B=-50\text{mA}$)		$V_{BE(sat)}$	—	—	-1.2	V
Base-Emitter On Voltage 基极发射极导通电压($V_{CE}=-1\text{V}$, $I_C=-300\text{mA}$)		$V_{BE(on)}$	—	—	-1.2	V
Transition Frequency 特征频率($V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$)		f_T	100	—	—	MHz
Output Capacitance 输出电容($V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$)		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	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°