



安徽富信半导体科技有限公司

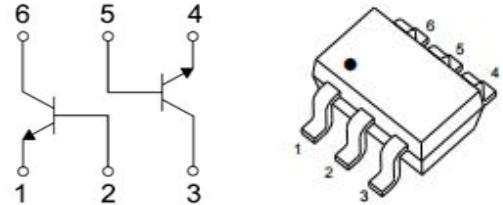
ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO. , LTD.

BC847BS

SOT-363 Bipolar Transistor 双极型三极管

■ Features 特点

NPN+NPN General Purpose 通用



■ 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}	45	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	6	V
Collector Current 集电极电流	I_C	100	mA
Power dissipation 耗散功率	$P_C(T_a=25^{\circ}C)$	200	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	625	$^{\circ}C/W$
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

Marking	1F
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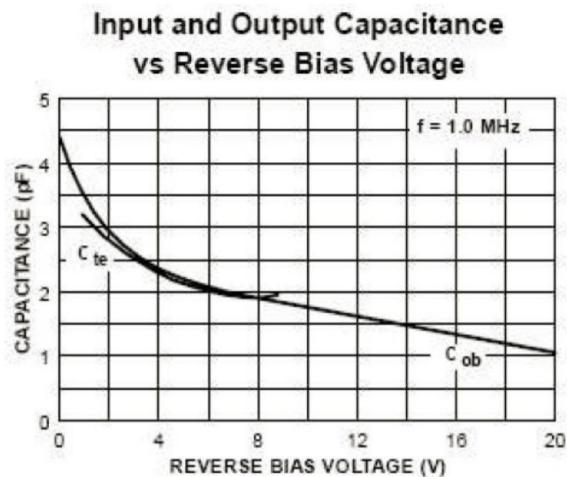
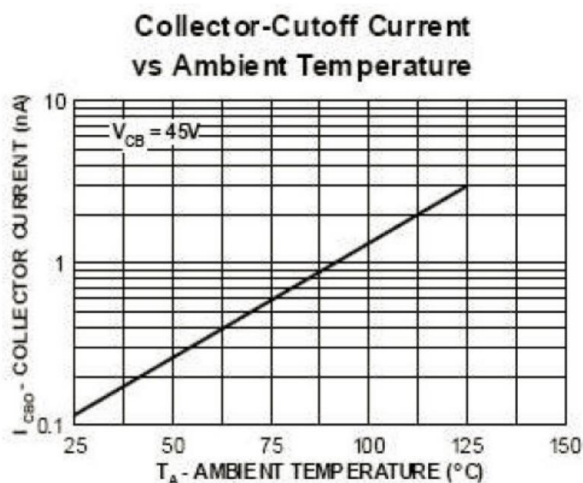
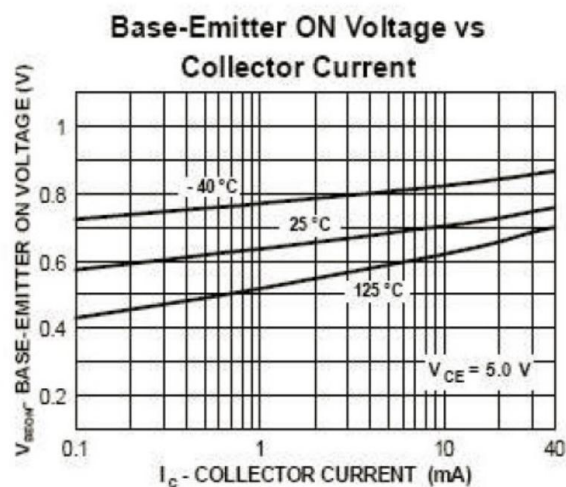
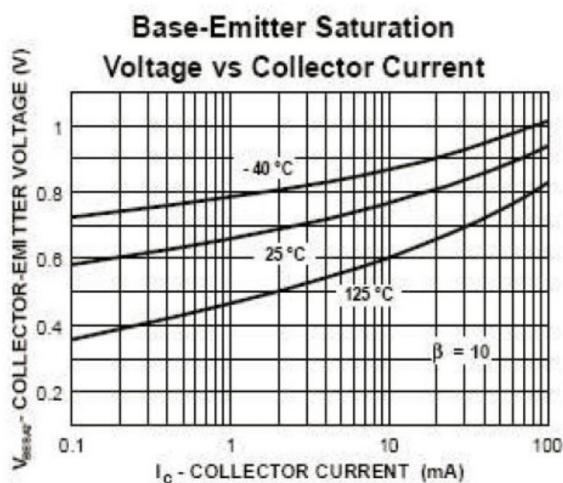
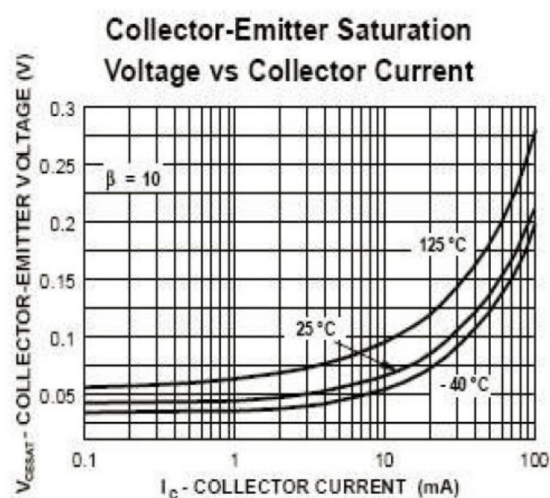
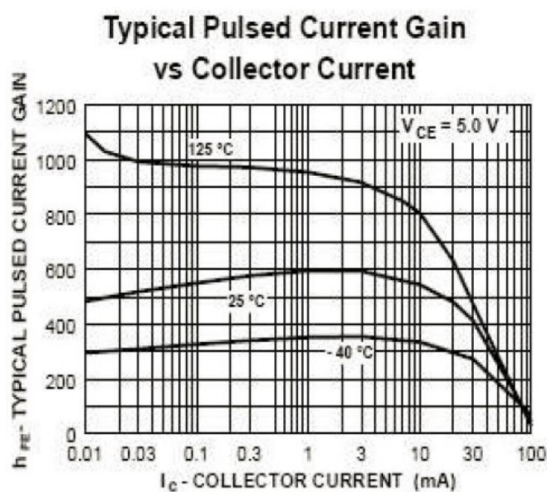


■Electrical Characteristics 电特性(NPN)

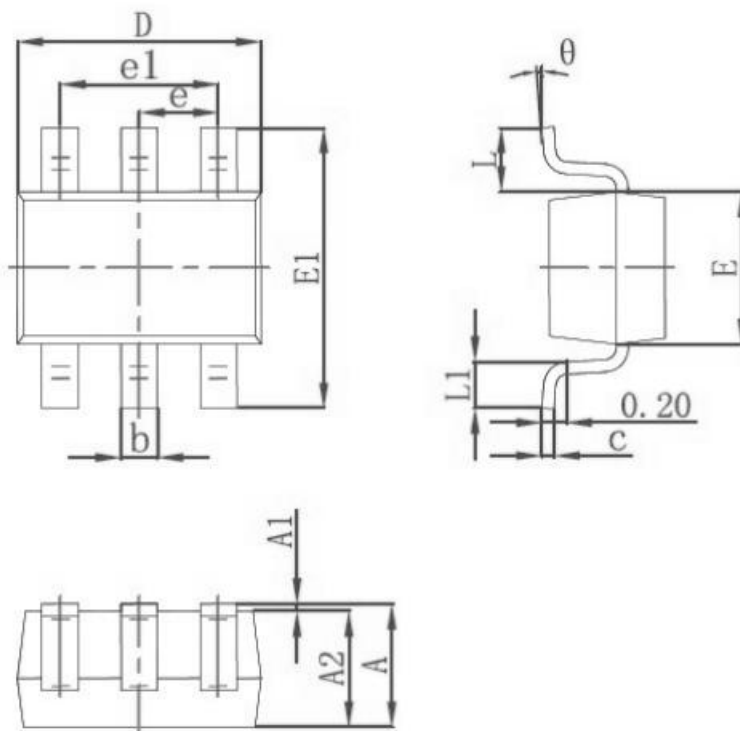
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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($I_C=10\mu\text{A}$, $I_E=0$)	BV_{CBO}	50	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压($I_C=1\text{mA}$, $I_B=0$)	BV_{CEO}	45	—	—	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}	6	—	—	V
Collector-Base Leakage Current 集电极基极漏电流($V_{CB}=30\text{V}$, $I_E=0$)	I_{CBO}	—	—	15	nA
Emitter-Base Leakage Current 发射极基极漏电流($V_{EB}=4\text{V}$, $I_C=0$)	I_{EBO}	—	—	15	nA
DC Current Gain 直流电流增益($V_{CE}=5\text{V}$, $I_C=2\text{mA}$)	H_{FE}	200	—	450	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降($I_C=10\text{mA}$, $I_B=0.5\text{mA}$) ($I_C=100\text{mA}$, $I_B=5\text{mA}$)	$V_{CE(sat)}$	—	—	0.25 0.65	V
Base-Emitter Voltage 基极发射极压降($V_{CE}=5\text{V}$, $I_C=2\text{mA}$) ($V_{CE}=5\text{V}$, $I_C=10\text{mA}$)	V_{BE}	0.58	—	0.7 0.77	V
Transition Frequency 特征频率($V_{CE}=5\text{V}$, $I_C=20\text{mA}$, $f=100\text{MHz}$)	f_T	—	200	—	MHz
Output Capacitance 输出电容($V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$)	C_{ob}	—	2	—	pF

■ Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.100	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.400
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
θ	0°	8°