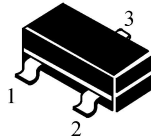


Features 特点

NPN General Purpose 通用

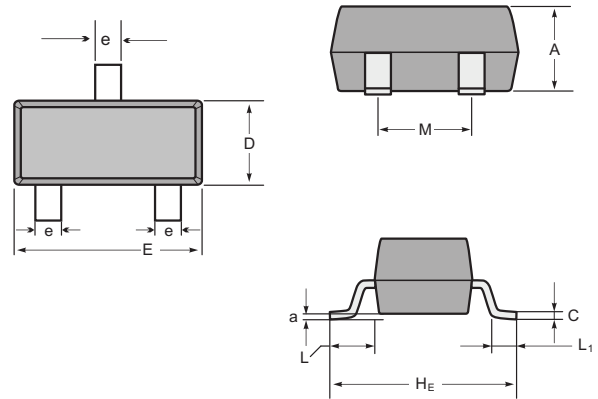
SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



Device Marking 产品打标

	H _{FE}	110-220(A)	200-450(B)	420-800(C)
Mark	BC846	1A	1B	1C
	BC847	1E	1F	1G
	BC848	1J	1K	1L



SOT-23 mechanical data

UNIT		A	C	D	E	H _E	e	M	L	L ₁	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号	BC846 A/B/C	BC847 A/B/C	BC848 A/B/C	Unit 单位
Collector-Base Voltage 集电极基极电压	V _{CBO}	80	50	30	V
Collector-Emitter Voltage 集电极发射极电压	V _{CEO}	65	45	30	V
Emitter-Base Voltage 发射极基极电压	V _{EBO}	6	6	5	V
Collector Current 集电极电流	I _C	100			mA
Power dissipation 耗散功率	P _C (T _a =25°C)	200			mW
Thermal Resistance Junction-Ambient 热阻	R _{θJA}	625			°C/W
Junction and Storage Temperature 结温和储藏温度	T _J , T _{stg}	-55to+150°C			

BC846/BC847/BC848

Electrical Characteristics 电特性

(T_A=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 _C =10uA, I _E =0)	BC846A/B/C BC847A/B/C BC848A/B/C	BV _{CBO}	80 50 30	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压 (I _C =10mA, I _B =0)	BC846A/B/C BC847A/B/C BC848A/B/C	BV _{CEO}	65 45 30	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压 (I _E =10uA, I _C =0)		BV _{EBO}	5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流	BC846A/B/C(V _{CB} =70V, I _E =0) BC847A/B/C(V _{CB} =50V, I _E =0) BC848A/B/C(V _{CB} =30V, 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 直流电流增益 (V _{CE} =5V, I _C =2mA)	BC846A/BC847A/BC848A BC846B/BC847B/BC848B BC846C/BC847C/BC848C	H _{FE}	110 200 420	180 290 520	220 450 800	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降 (I _C =100mA, I _B =5mA)		V _{CE(sat)}	—	—	0.5	V
Base-Emitter Saturation Voltage 基极发射极饱和压降 (I _C =100mA, I _B =5mA)		V _{BE(sat)}	—	—	1.1	V
Transition Frequency 特征频率 (V _{CE} =5V, I _C =10mA)		f _T	100	—	—	MHz
Output Capacitance 输出电容 (V _{CB} =10V, I _E =0, f=1MHz)		C _{ob}	—	4.5	—	pF

RATING AND CHARACTERISTIC CURVES (BC846/BC847/BC848)

