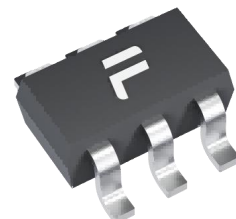
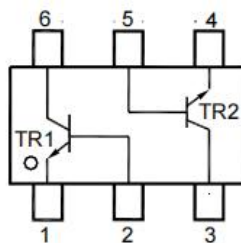


BC846DW/BC847DW/BC848DW

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	BC846 ADW/BDW/CDW	BC847 ADW/BDW/CDW	BC848 ADW/BDW/CDW	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 ($T_a=25^\circ\text{C}$)	200			mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	625			$^\circ\text{C}/\text{W}$
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

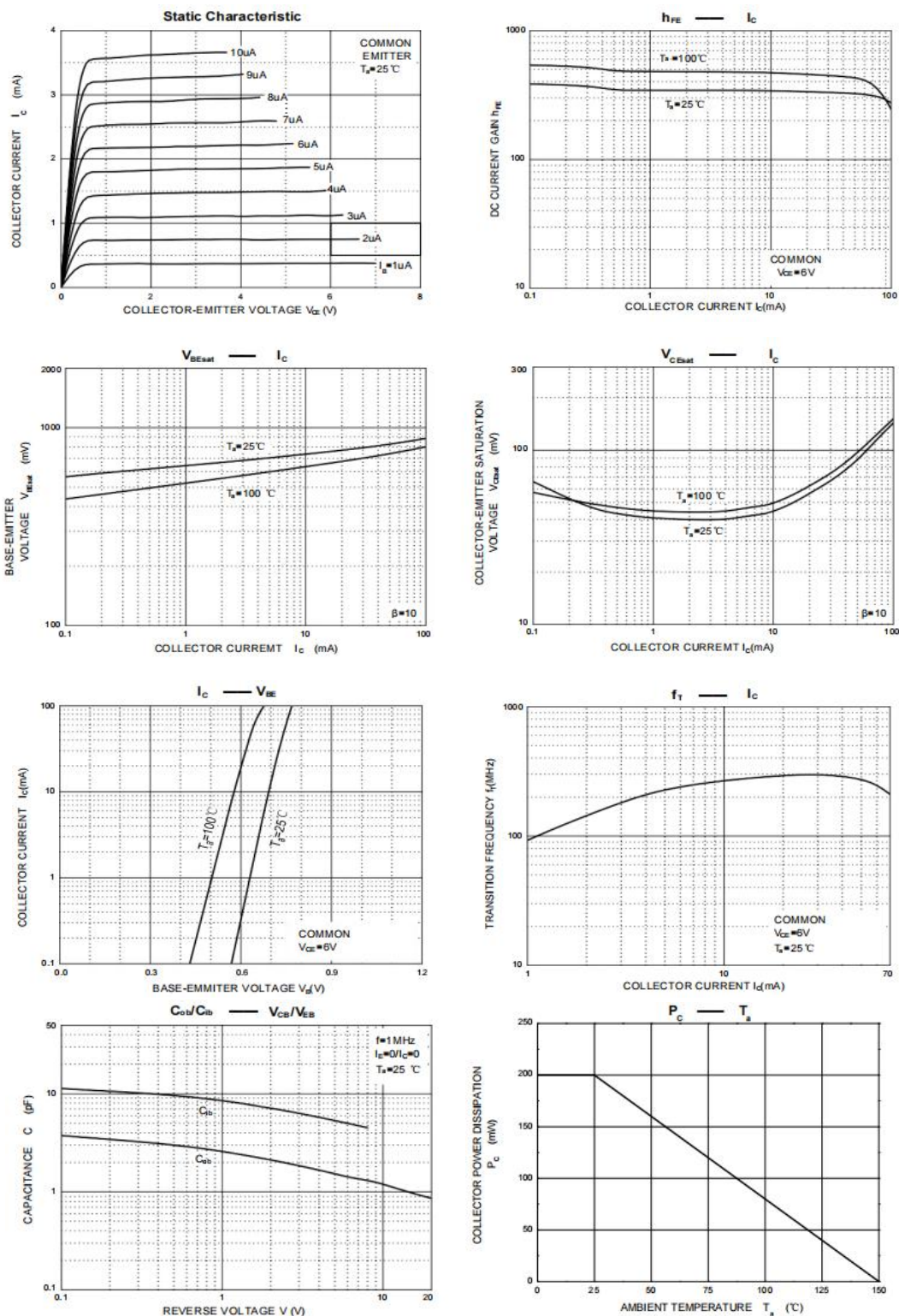
H_{FE}		110-220(ADW)	200-450(BDW)	420-800(CDW)
Mark	BC846	4At	4Bt	4Gt
	BC847	1Et	1Ft	1Gt
	BC848	1Jt	1Kt	1Lt

■Electrical Characteristics 电特性

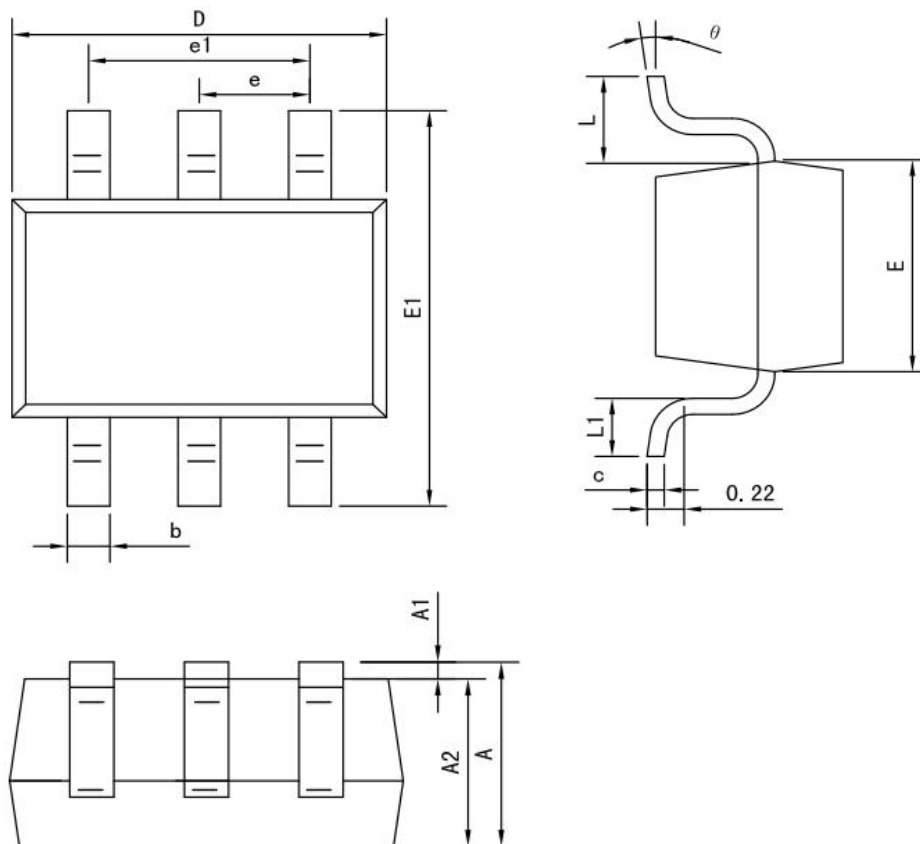
(TA=25℃ unless otherwise noted 如无特殊说明, 温度为 25℃)

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 (IC=10uA, IE=0)	BC846ADW/BDW/CDW	BV _{CBO}	80	—	—	V
	BC847ADW/BDW/CDW		50			
	BC848ADW/BDW/CDW		30			
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压 (IC=10mA, IB=0)	BC846ADW/BDW/CDW	BV _{CEO}	65	—	—	V
	BC847ADW/BDW/CDW		45			
	BC848ADW/BDW/CDW		30			
Emitter-Base Breakdown Voltage 发射极基极击穿电压(IE=10uA, IC=0)		BV _{EBO}	5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流	BC846ADW/BDW/CDW(V _{CB} =70V,IE=0)	I _{CBO}	—	—	100	nA
	BC847ADW/BDW/CDW(V _{CB} =50V,IE=0)					
	BC848ADW/BDW/CDW(V _{CB} =30V,IE=0)					
Emitter-Base Leakage Current 发射极基极漏电流(V _{EB} =5V, IC=0)		I _{EBO}	—	—	100	nA
DC Current Gain 直流电流增益 (V _{CE} =5V,IC=2mA)	BC846ADW/BC847ADW/BC848ADW	H _{FE}	110	180	220	
	BC846BDW/BC847BDW/BC848BDW		200	290	450	
	BC846CDW/BC847CDW/BC848CDW		420	520	800	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降(IC=100mA, IB=5mA)		V _{CE(sat)}	—	—	0.6	V
Base-Emitter Saturation Voltage 基极发射极饱和压降(IC=100mA, IB=5mA)		V _{BE(sat)}	—	—	1.1	V
Base-Emitter On Voltage(V _{CE} =5V,IC=2mA) 基极发射极导通压降(V _{CE} =5V,IC=10mA)		V _{BE(on)}	—	—	0.7 0.77	V
Transition Frequency 特征频率(V _{CE} =5V, IC=10mA)		f _T	100	200	—	MHz
Output Capacitance 输出电容(V _{CB} =10V, IE=0, f=1MHz)		C _{ob}	—	2	4	pF

■ Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



Symbol	Dimension 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	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
θ	0°	8°