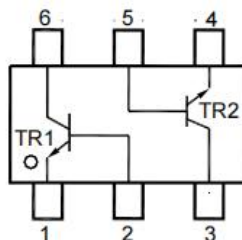


SOT-23-6L Bipolar Transistor 双极型三极管

■ 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}	5	V
Collector Current 集电极电流	I_C	500	mA
Power dissipation 耗散功率	$P_C(T_a=25^{\circ}C)$	300	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	417	$^{\circ}C/W$
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

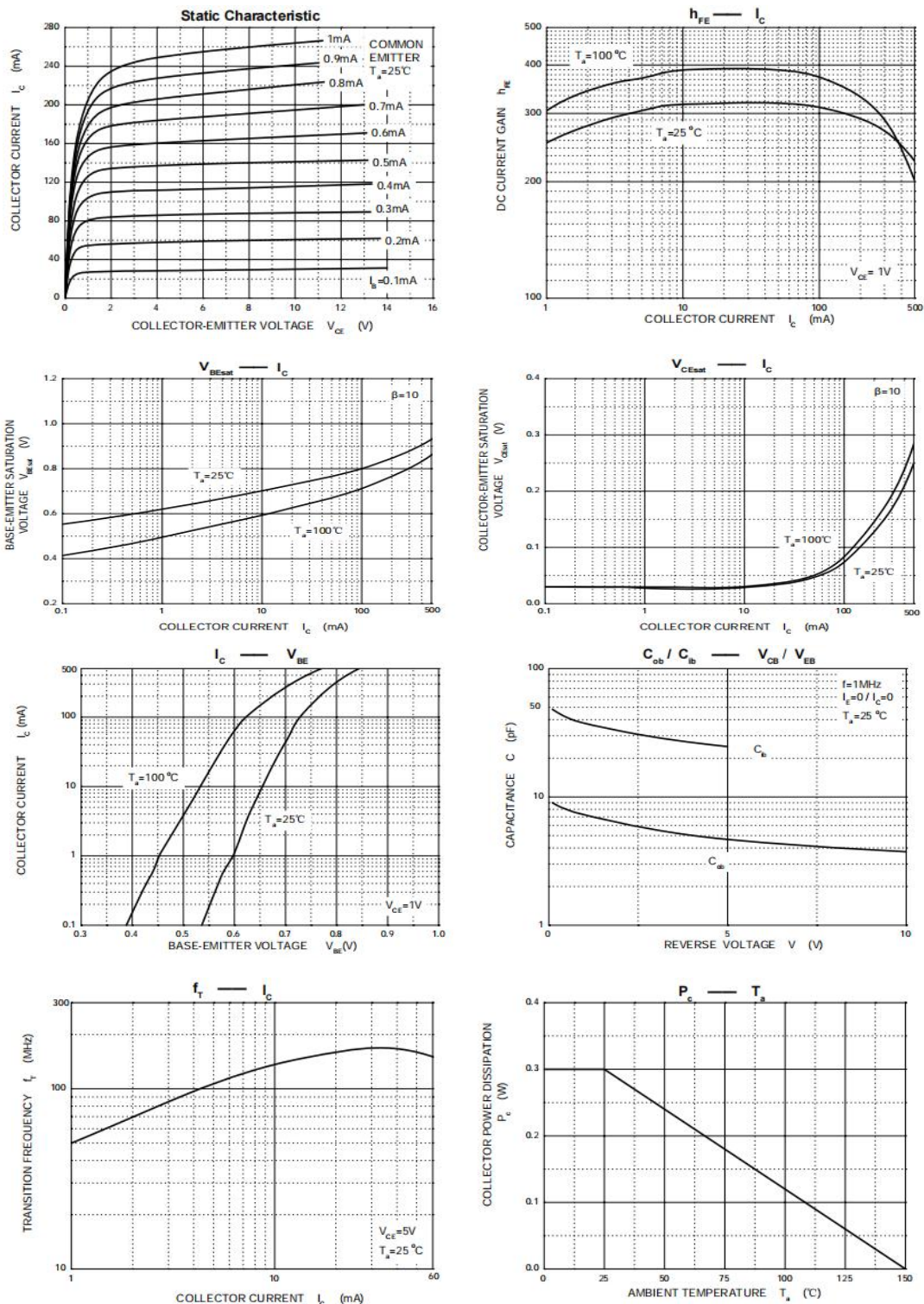
H_{FE}	100-250 (BC817D-16)	160-400 (BC817D-25)	250-600 (BC817D-40)
Mark	6A	6B	6C

■Electrical Characteristics 电特性

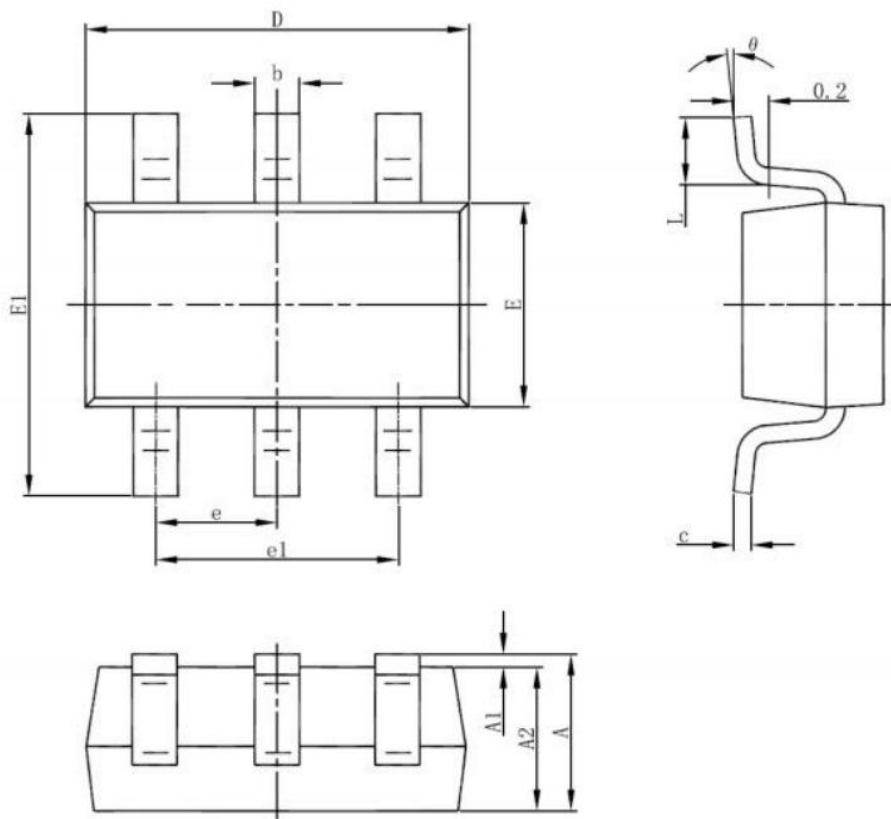
(TA=25℃ unless otherwise noted 如无特殊说明, 温度为 25℃)

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= 10μA, IE=0)	BV _{CBO}	50	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压(IC= 10mA, IB=0)	BV _{CEO}	45	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压(IE= 10μA, IC=0)	BV _{EBO}	5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流(V _{CB} =50V, IE=0)	I _{CBO}	—	—	100	nA
Emitter-Base Leakage Current 发射极基极漏电流(V _{EB} =4V, IC=0)	I _{EBO}	—	—	100	nA
DC Current Gain 直流电流增益 (V _{CE} = 1V, IC= 100mA)	BC817D-16 BC817D-25 BC817D-40 H _{FE}	100 160 250	—	250 400 600	
DC Current Gain 直流电流增益(V _{CE} = 1V, IC= 500mA)	H _{FE}	40			
Collector-Emitter Saturation Voltage 集电极发射极饱和压降(IC= 500mA, IB= 50mA)	V _{CE(sat)}	—	—	0.7	V
Base-Emitter Saturation Voltage 基极发射极饱和压降(IC= 500mA, IB= 50mA)	V _{BE(sat)}	—	—	1.2	V
Base-Emitter On Voltage 基极发射极导通电压(V _{CE} = 1V, IC= 500mA)	V _{BE(on)}	—	—	1.2	V
Transition Frequency 特征频率(V _{CE} = 5V, IC= 10mA)	f _T	100	—	—	MHz
Output Capacitance 输出电容(V _{CB} = 10V, IE=0, f=1MHz)	C _{ob}	—	10	—	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	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.900	1.00	0.035	0.039
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.022	0.026
θ	0°	8°	0°	8°