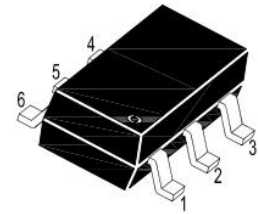
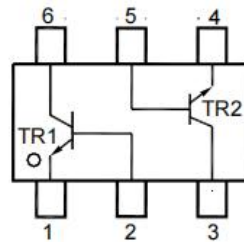


**SOT-23-6L Bipolar Transistor 双极型三极管**

■ **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	$P_C(T_a=25^\circ\text{C})$	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**

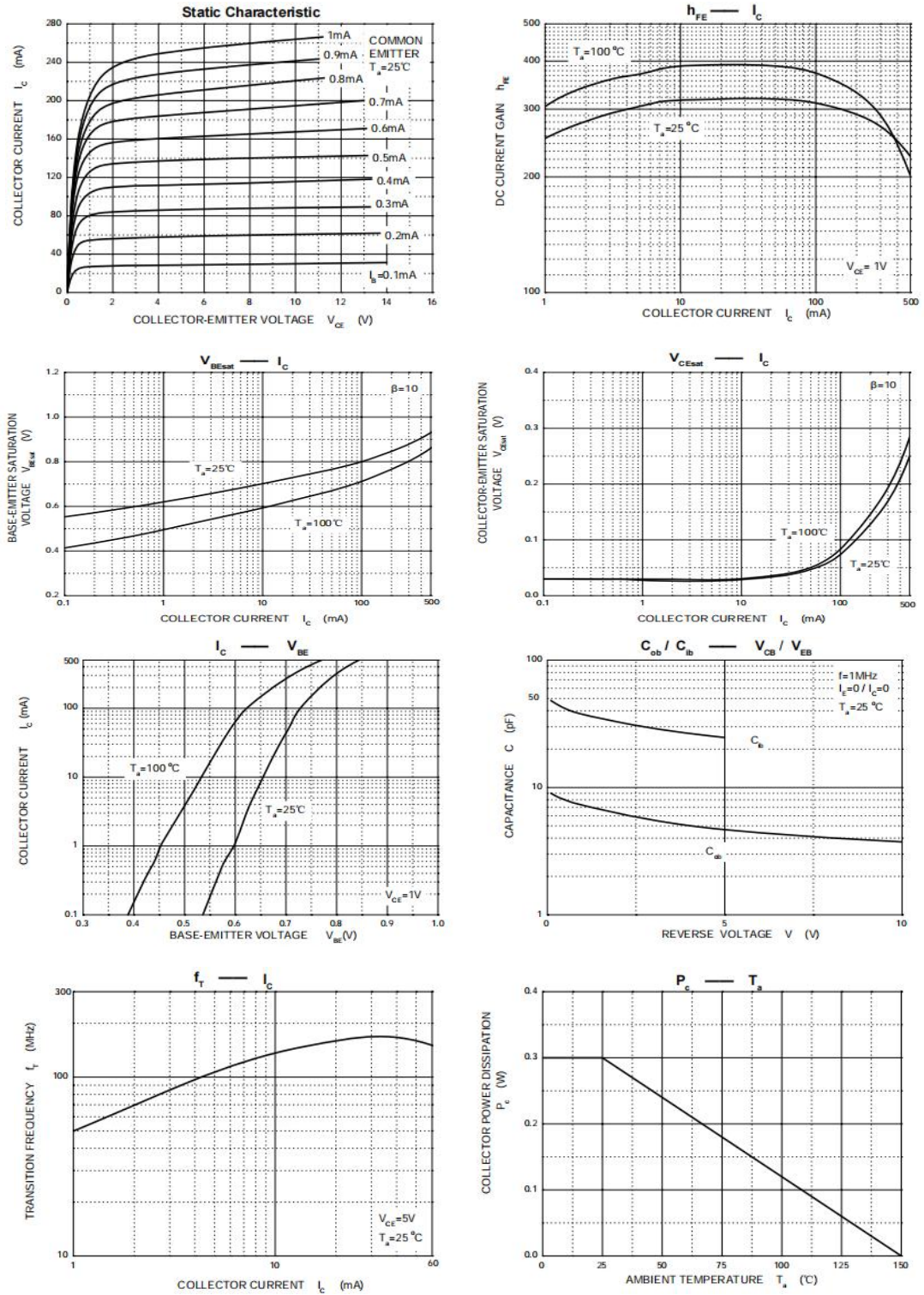
$H_{FE}$	100-250 (BC817D-16)	160-400 (BC817D-25)	250-600 (BC817D-40)
Mark	6A	6B	6C

■ **Electrical Characteristics** 电特性

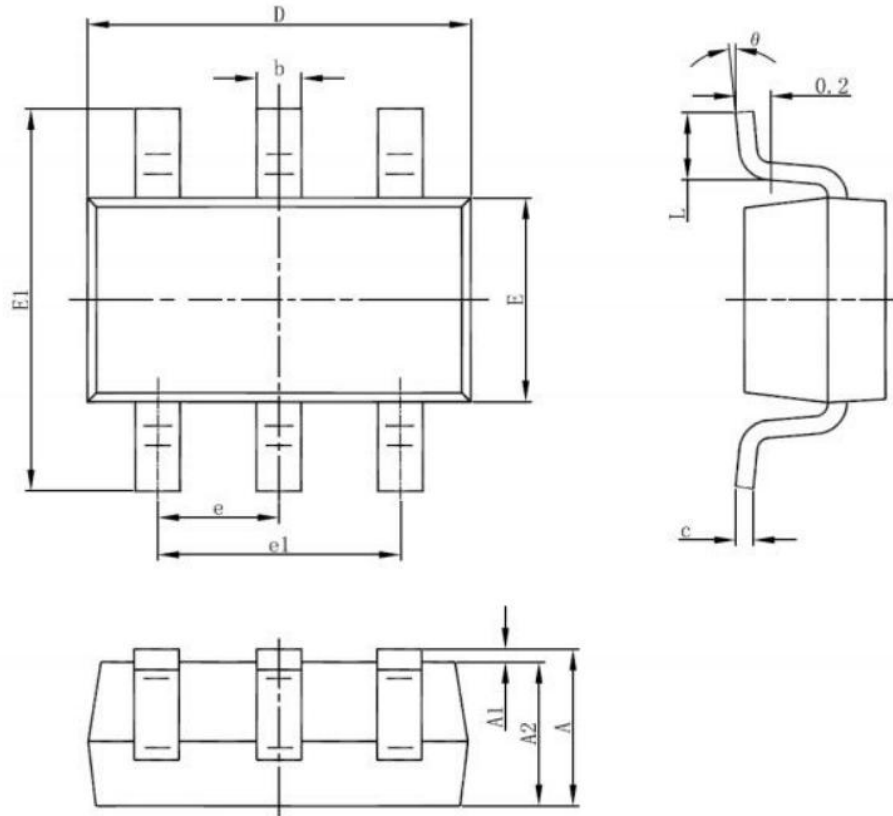
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

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( $I_C=10\text{mA}$ , $I_B=0$ )	$BV_{CEO}$	45	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压( $I_E=10\mu\text{A}$ , $I_C=0$ )	$BV_{EBO}$	5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流( $V_{CB}=50\text{V}$ , $I_E=0$ )	$I_{CBO}$	—	—	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 ( $V_{CE}=1\text{V}$ , $I_C=100\text{mA}$ )	$H_{FE}$	BC817D-16	100	250	
		BC817D-25	160	400	
		BC817D-40	250	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( $V_{CE}=1\text{V}$ , $I_C=500\text{mA}$ )	$V_{BE(on)}$	—	—	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( $V_{CB}=10\text{V}$ , $I_E=0$ , $f=1\text{MHz}$ )	$C_{ob}$	—	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°