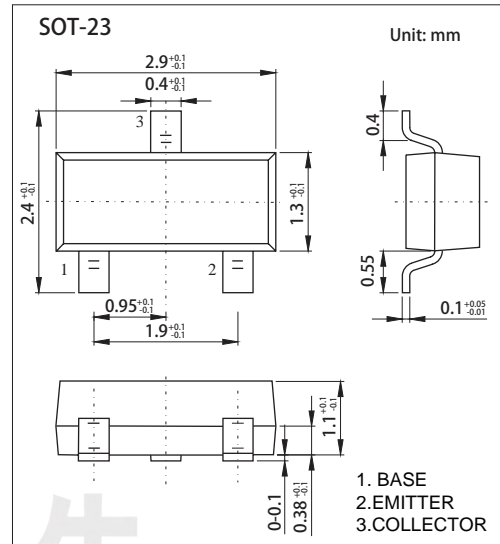


NPN Transistors BC817

■ Features

- High collector current
- High current gain
- Low collector-emitter saturation voltage
- Complementary to BC807



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	50	V
Collector - Emitter Voltage	V_{CEO}	45	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	500	mA
Collector Power Dissipation	P_C	300	mW
Thermal Resistance, junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 150	

NPN Transistors BC817

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = 10 μA, I _E =0	50			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = 1 mA, I _B =0	45			
Emitter - base breakdown voltage	V _{EB0}	I _E = 1 μA, I _C =0	5			
Collector cut-off current	I _{CBO}	V _{CB} = 45 V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 4V, I _C =0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500 mA, I _B = 50mA			0.7	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =500 mA, I _B = 50mA			1.2	
Base - emitter voltage	V _{BE}	V _{CE} = 1V, I _C = 500mA			1.2	
DC current gain	h _{FE(1)}	V _{CE} = 1V, I _C = 100mA	100		600	
	h _{FE(2)}	V _{CE} = 1V, I _C = 500mA	40			
Collector capacitance	C _{ob}	V _{CB} =10V, f=1MHz		10		pF
Transition frequency	f _T	V _{CE} = 5V, I _C = 10mA, f=100MHz	100			MHz

■ Classification of h_{FE(1)}

Rank	BC817-16	BC817-25	BC817-40
Range	100-250	160-400	250-600
Marking	6A	6B	6C

NPN Transistors BC817

■ Typical Characteristics

