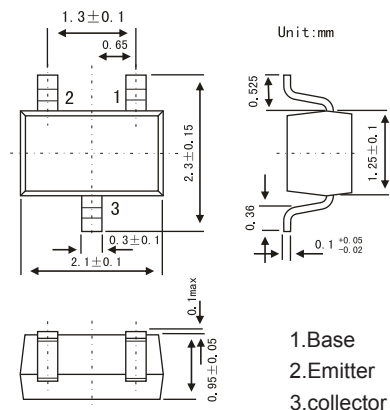


SOT-323

■ Features

- For General AF Applications
- High Collector Current
- High Current Gain
- Low Collector-Emitter Saturation Voltage
- Complementary to BC807W



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	50	V
Collector - Emitter Voltage	V _{CEO}	45	
Emitter - Base Voltage	V _{EB0}	5	
Collector Current - Continuous	I _c	0.5	A
Collector Power Dissipation	P _c	0.2	W
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100 μA, I _E =0	50			V
Collector- emitter breakdown voltage	V _{CEO}	I _c = 10 mA, I _B =0	45			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _c =0	5			
Collector-base cut-off current	I _{CB0}	V _{CB} = 50 V, I _E =0			0.1	μA
Emitter cut-off current	I _{EB0}	V _{EB} = 5V, 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(on)}	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 output capacitance	C _{ob}	V _{CB} = 10V, f=1MHz			5	pF
Transition frequency	f _T	V _{CE} = 5V, I _c = 10mA, f=100MHz	100			MHz

■ Classification of h_{FE(1)}

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



■ Typical Characteristics

