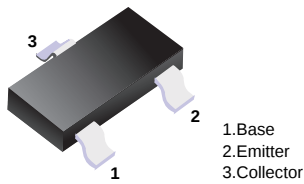
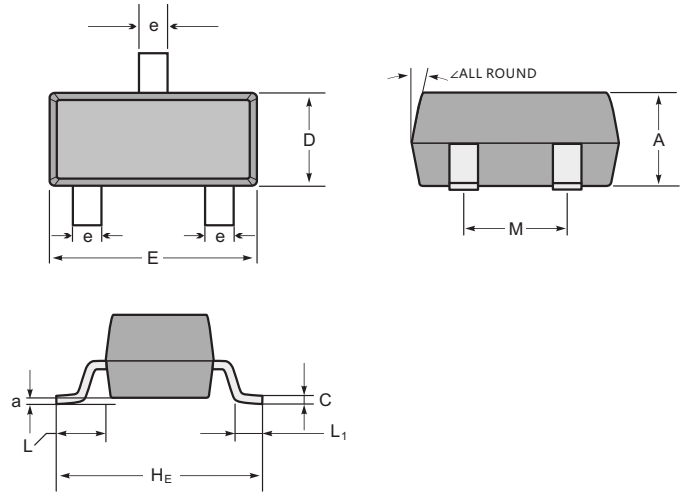


■ Features

- For general AF applications
- Low collector-emitter saturation voltage
- Complementary types: BC807 (PNP)



■ Simplified outline(SOT-23)



SOT-23 mechanical data

UNIT		A	C	D	E	H _E	e	M	L	L ₁	a	∠
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0	12°
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15	
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0	
	min	35	3	47	110	87	12	67			6	

■ 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	0.3	W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to 150	

BC817

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CBO}	I _C = 100 μ A, 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 μ A, I _C = 0	5			
Collector-base cut-off current	I _{CBO}	V _{CB} = 45 V , I _E = 0			0.1	μ A
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		630	
	h _{FE(2)}	V _{CE} = 1V, I _C = 500mA	40			
Collector output 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)

Type	BC817-16	BC817-25	BC817-40
Range	100-250	160-400	250-630
Marking	6A	6B	6C

RATING AND CHARACTERISTIC CURVES (BC817)

