

FEATURES

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

BC817-16 (NPN)
BC817-25 (NPN)
BC817-40 (NPN)

Marking

BC817-16	BC817-25	BC817-40
6A	6B	6C

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	50	V
DCollector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current -Continuous	I _C	500	mA
Collector Power Dissipation	P _C	300	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{CB}	I _C = 10μA, I _E =0	50		V
Collector-emitter breakdown voltage	V _{CE}	I _C = 10mA, I _B =0	45		V
Emitter-base breakdown voltage	V _{EB}	I _E = 1μA, I _C =0	5		V
Collector cut-off current	I _{CB}	V _{CB} = 45 V, I _E =0		0.1	μA
Emitter cut-off current	I _{EB}	V _{EB} = 4V, I _C =0		0.1	μA
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-emitter saturation voltage	V _{CE(sat)}	I _C = 500mA, I _B = 50mA		0.7	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 500mA, I _B = 50mA		1.2	V
Base-emitter voltage	V _B	V _{CE} = 1 V, I _C = 500mA		1.2	V
Collector capacitance	C _{ob}	V _{CB} =10V, f=1MHz		10	pF
Transition frequency	f _T	V _{CE} = 5 V, I _C = 10mA f=100MHz	100		MHz

CLASSIFICATION OF h_{FE}

Rank	6A	6B	6C
Range	100-250	160-400	250-600

BC817-16
BC817-25 Typical Characteristics
BC817-40

