

FEATURES

For general AF applications

High collector current

High current gain

Low collector-emitter saturation voltage

Marking

BC818-16	BC818-25	BC818-40
6E	6F	6G

BC818-16 (NPN)

BC818-25 (NPN)

BC818-40 (NPN)



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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	30	V
DCollector-Emitter Voltage	V _{CEO}	25	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	30		V
Collector-emitter breakdown voltage	V _{CE}	I _C = 10mA, I _B =0	25		V
Emitter-base breakdown voltage	V _{EB}	I _E = 10μA, I _C =0	5		V
Collector cut-off current	I _{CB}	V _{CB} = 25 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	630	
	h _{FE} (2)	V _{CE} = 1V, I _C = 300mA	60		
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} =1V, I _C = 500mA		1.2	V
Collector capacitance	C _{ob}	V _{CB} =10V ,f=1MHz		6	pF
Transition frequency	f	V _{CE} = 5 V, I _C = 50Ma f=100MHz		170	MHz

CLASSIFICATION OF h_{FE}

Rank	6E	6F	6G
Range	100-250	160-400	250-630

BC818-16

BC818-25 Typical Characteristics

BC818-40

