

**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 <sub>CBO</sub>	30	V
DCollector-Emitter Voltage	V <sub>CEO</sub>	25	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current -Continuous	I <sub>C</sub>	500	mA
Collector Power Dissipation	P <sub>C</sub>	300	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V <sub>CB</sub>	I <sub>C</sub> = 10μA, I <sub>E</sub> =0	30		V
Collector-emitter breakdown voltage	V <sub>CE</sub>	I <sub>C</sub> = 10mA, I <sub>B</sub> =0	25		V
Emitter-base breakdown voltage	V <sub>EB</sub>	I <sub>E</sub> = 10μA, I <sub>C</sub> =0	5		V
Collector cut-off current	I <sub>CB</sub>	V <sub>CB</sub> = 25 V, I <sub>E</sub> =0		0.1	μA
Emitter cut-off current	I <sub>EB</sub>	V <sub>EB</sub> = 4V, I <sub>C</sub> =0		0.1	μA
DC current gain	h <sub>FE</sub> (1)	V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA	100	630	
	h <sub>FE</sub> (2)	V <sub>CE</sub> = 1V, I <sub>C</sub> = 300mA	60		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 500mA, I <sub>B</sub> = 50mA		0.7	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 500mA, I <sub>B</sub> = 50mA		1.2	V
Base-emitter voltage	V <sub>B</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> = 500mA		1.2	V
Collector capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, f=1MHz		6	pF
Transition frequency	f	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 50Ma f=100MHz		170	MHz

CLASSIFICATION OF h<sub>FE</sub>

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

**BC818-16**

**BC818-25** Typical Characteristics

**BC818-40**

