

BC817/BC818

NPN EPITAXIAL SILICON TRANSISTOR

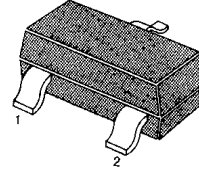
SWITCHING AND AMPLIFIER APPLICATIONS

- Suitable for AF-Driver stages and low power output stages
- Complement to BC807/BC808

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage : BC817	V _{CES}	50	V
: BC818		30	V
Collector Emitter Voltage : BC817	V _{CEO}	45	V
: BC818		25	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current (DC)	I _C	800	mA
Collector Dissipation	P _C	310	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-65 ~ 150	°C

SOT-23



1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage : BC817	BV _{CEO}	I _C =10mA, I _B =0	45			V
: BC818			25			V
Collector-Emitter Breakdown Voltage : BC817	BV _{CES}	I _C =0.1mA, I _B =0	50			V
: BC818			30			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =0.1mA, I _C =0	5			V
Collector Cut-off Current	I _{CES}	V _{CE} =25V, I _B =0			100	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} =4V, I _C =0			100	nA
DC Current Gain	h _{FE1}	V _{CE} =1V, I _C =100mA	100		630	
	h _{FE2}	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 On Voltage	V _{BE (on)}	V _{CE} =1V, I _C =300mA			1.2	V
Current Gain Bandwidth Product	f _T	V _{CE} =5V, I _C =10mA f=50MHz		100		MHz
Collector-Base Capacitance	C _{CB0}	V _{CB} =10V, f=1MHz			12	pF

h_{FE} CLASSIFICATION

Classification	16	25	40
h _{FE1}	100-250	160-400	250-630
h _{FE2}	60-	100-	170-

MARKING CODE

TYPE	817-16	817-25	817-40	818-16	818-25	818-40
MARKING	8FA	8FB	8FC	8GA	8GB	8GC

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