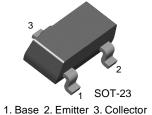


BC817/BC818

Switching and Amplifier Applications

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



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a =25°C unless otherwise noted

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

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA, I _B =0				
	: BC817		45			V
	: BC818		25			V
BV _{CES}	Collector-Emitter Breakdown Voltage	I _C =0.1mA, V _{BE} =0				
	: BC817		50			V
	: BC818		30			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E =0.1mA, I _C =0	5			V
I _{CES}	Collector Cut-off Current	V_{CE} =25V, V_{BE} =0			100	nA
I _{EBO}	Emitter Cut-off Current	V_{EB} =4V, I_{C} =0			100	nA
h _{FE1}	DC Current Gain	V _{CE} =1V, I _C =100mA	100		630	
h _{FE2}		$V_{CE}=1V$, $I_{C}=300$ mA	60			
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C =500mA, I _B =50mA			0.7	V
V _{BE} (on)	Base-Emitter On Voltage	V _{CE} =1V, I _C =300mA			1.2	V
f _T	Current Gain Bandwidth Product	V _{CE} =5V, I _C =10mA f=50MHz		100		MHz
C _{ob}	Output Capacitance	V _{CB} =10V, f=1MHz			12	pF

h_{FE} Classification

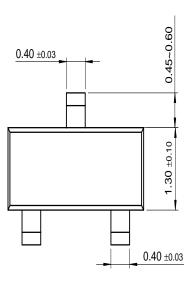
Classification	16	25	40
h _{FE1}	100 ~ 250	160 ~ 400	250 ~ 630
h _{FE2}	60 ~	100 ~	170 ~

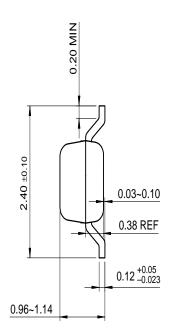
Marking Code

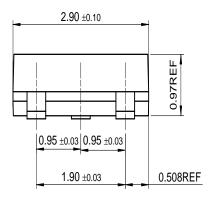
Туре	817-16	817-25	817-40	818-16	818-25	818-40
Marking	8FA	8FB	8FC	8GA	8GB	8GC

Package Dimensions

SOT-23







Dimensions in Millimeters

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EnSigna™	I^2C^{TM}	OCX^{TM}	RapidConfigure™	UHC™
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The Power Franchise™		OPTOLOGIC [®]	SILENT SWITCHER®	VCX^{TM}
Programmable Ad	ctive Droop™	OPTOPLANAR™	SMART START™	

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Definition of Terms

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