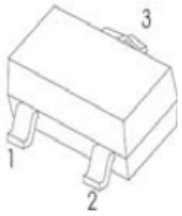
OTOMO

Best (Shenzhen) Supply Chain Management Co., Ltd.

BC817

Silicon NPN Power Transistor



1：Base 2：Emitter 3：Collector

SOT-23

FEATURES

1. High collector current, high current gain

2. Complementary PNP type availabe BC807

3.Low collector-emitter saturation voltag

Maximum ratings(Ta=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	VCBO	50	V
Collector-Emitter Breakdown Voltage	VCEO	45	V
Emitter-Base Breakdown Voltage	VEBO	5	V
Collector Current	IC	500	mA
Collector Power Dissipation	PC	300	mW
Junction Temperature	TJ	150	℃
Storage Temperature	Tstg	-55~150	℃

Electrical Characteristics (Ta=25℃ unless otherwise noted)

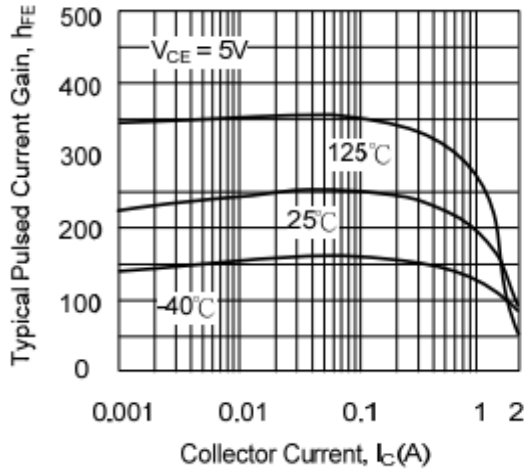
Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	VCBO	IC=10uA IE=0	50		V
Collector-Emitter Breakdown Voltage	VCEO	IC=10mA IB=0	45		V
Emitter-Base Breakdown Voltage	VEBO	IE=10uA IC=0	5		V
Collector Cutoff Current	ICBO	VCB=25V IE=0		100	nA
Emitter Cutoff Current	IEBO	VCB=5V IB=0		100	nA
DC Current Gain	HFE(1)	VCE=1V IC=100mA	100	600	
	HFE(2)	VCE=1V IC=300mA	60		
Collector-Emitter Saturation Voltage	VCE(sat)	IC=500mA IB=50mA		0.7	V
Base-Emitter Saturation Voltage	VBE(sat)	IC=500mA IB=50mA		1.2	V

CLASSIFICATION OF HFE(1)

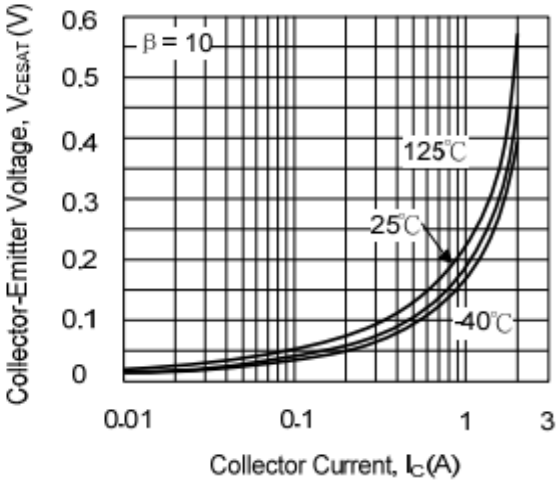
Rank	16	25	40
Range	100-250	160-400	250-600

Typical Characteristics

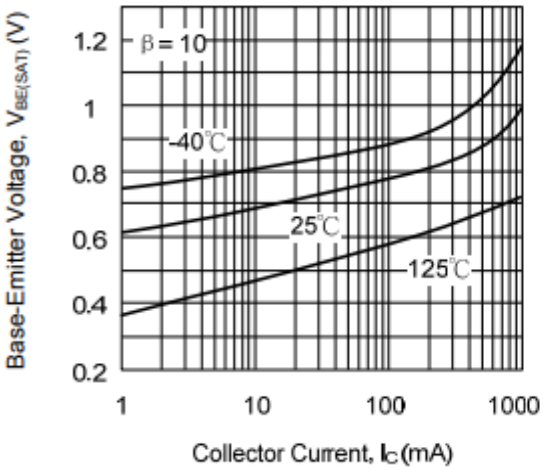
Typical Pulsed Current Gain vs. Collector Current



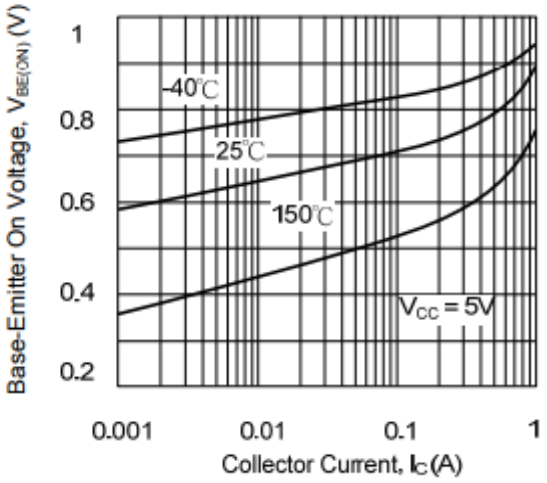
Collector-Emitter Saturation Voltage vs. Collector Current



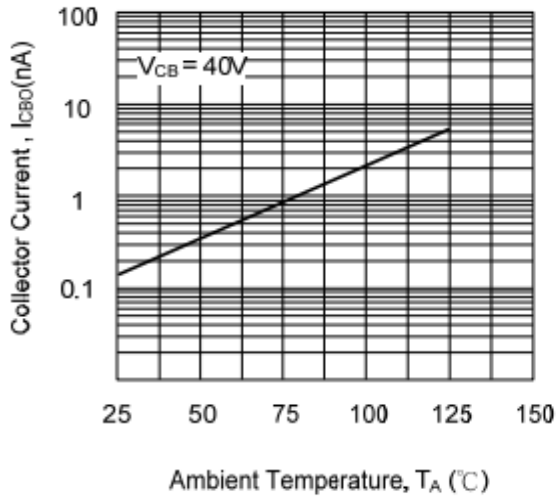
Base-Emitter Saturation Voltage vs. Collector Current



Base-Emitter on Voltage vs. Collector Current



Collector-Cut off Current vs. Ambient Temperature



Collector-Base Capacitance vs. Collector-Base Voltage