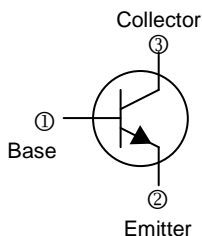


RoHS Compliant Product

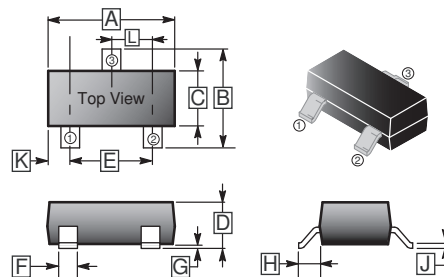
A suffix of "-C" specifies halogen & lead-free

FEATURES

- For general AF applications
- High collector current
- High current gain
- Low collector-emitter saturation voltage
- Complementary types: BC807 (PNP)



SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.04	G	-	0.18
B	2.10	2.80	H	0.40	0.60
C	1.20	1.60	J	0.08	0.20
D	0.89	1.40	K	0.6 REF.	
E	1.78	2.04	L	0.85	1.15
F	0.30	0.50			

ABSOLUTE MAXIMUM RATINGS at T_A = 25°C

PARAMETER	SYMBOL	RATINGS	UNIT
Collector - Base Voltage	V _{CBO}	50	V
Collector - Emitter Voltage	V _{CEO}	45	V
Emitter - Base Voltage	V _{EBO}	5	V
Collector Current - Continuous	I _C	500	mA
Collector Power Dissipation	P _C	300	mW
Junction & Storage Temperature	T _J , T _{STG}	150, -55 ~ +150	°C

CHARACTERISTICS at T_A = 25°C

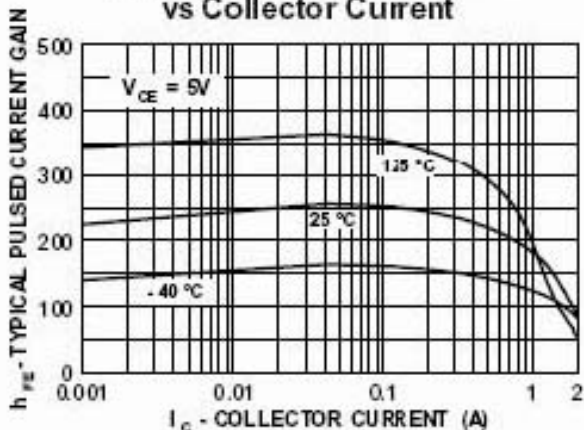
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector-base Breakdown Voltage	V _{CBO}	50	-	-	V	I _C = 10 μA, I _E = 0
Collector-emitter Breakdown Voltage	V _{CEO}	45	-	-	V	I _C = 10 mA, I _B = 0
Emitter-base Breakdown Voltage	V _{EBO}	5	-	-	V	I _E = 1 μA, I _C = 0
Collector Cut-off Current	I _{CBO}	-	-	0.1	μA	V _{CB} = 45V, I _E = 0
Emitter Cut-off Current	I _{EBO}	-	-	0.1	μA	V _{EB} = 4V, I _C = 0
DC Current Gain	h _{FE(1)}	100	-	600		V _{CE} = 1 V, I _C = 100 mA
DC Current Gain	h _{FE(2)}	40	-	-		V _{CE} = 1 V, I _C = 500 mA
Collector-emitter Saturation Voltage	V _{CE(sat)}	-	-	0.7	V	I _C = 500mA, I _B = 50 mA
Base-emitter Saturation Voltage	V _{BE(sat)}	-	-	1.2	V	I _C = 500mA, I _B = 50 mA
Base-emitter Voltage	V _{BE}	-	-	1.2	V	V _{CE} = 1V, I _C = 500mA
Collector Capacitance	C _{ob}	-	10	-	pF	V _{CB} = 10V, f=1MHz
Transition Frequency	f _T	100	-	-	MHz	V _{CE} = 5 V, I _C = 10 mA, f = 100MHz

CLASSIFICATION OF h_{FE(1)}

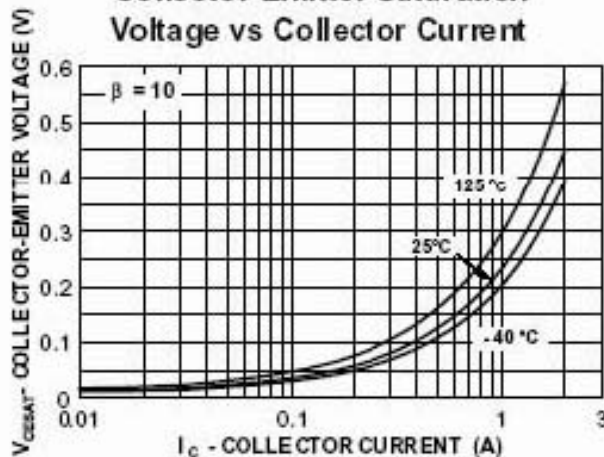
Rank	BC817-16	BC817-25	BC817-40
Range	100 - 250	160 - 400	250 - 600
Marking	6A	6B	6C

CHARACTERISTIC CURVES

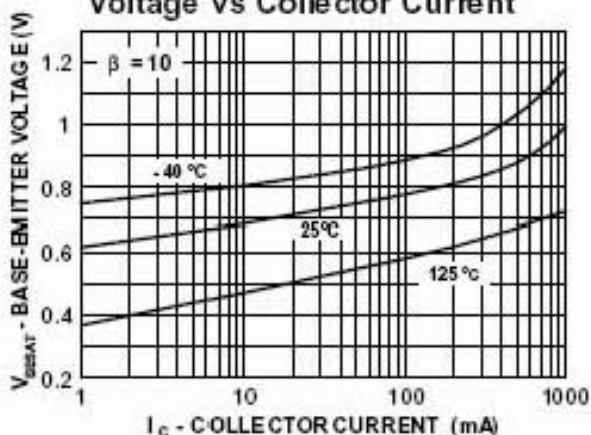
Typical Pulsed Current Gain vs Collector Current



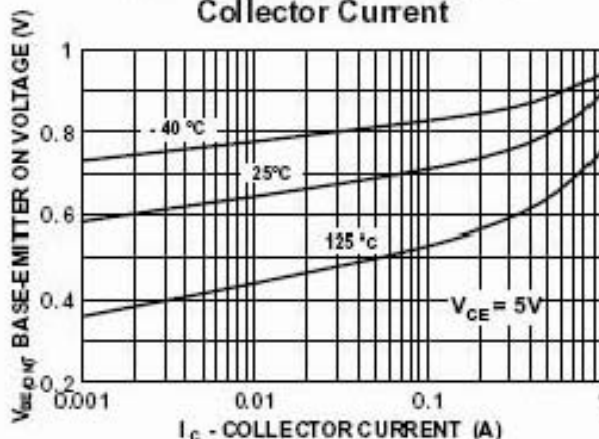
Collector-Emitter Saturation Voltage vs Collector Current



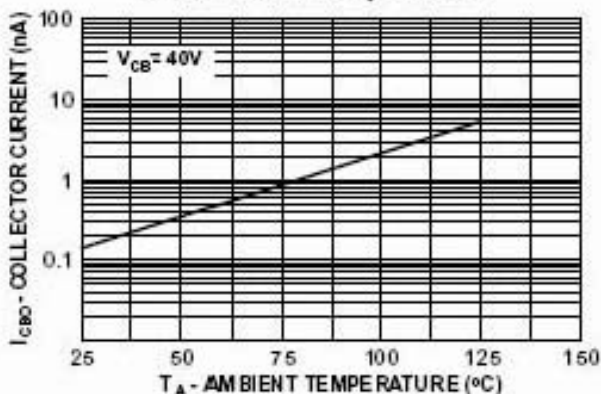
Base-Emitter Saturation Voltage vs Collector Current



Base-Emitter ON Voltage vs Collector Current



Collector-Cutoff Current vs Ambient Temperature



Collector-Base Capacitance vs Collector-Base Voltage

