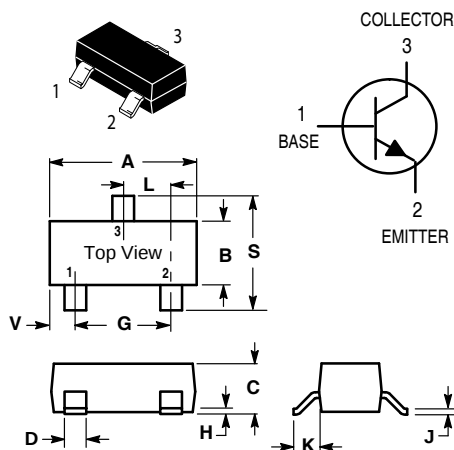


RoHS Compliant Product

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

FEATURES

- Power dissipation
 P_{CM} : 300 mW ($T_{amb}=25^{\circ}C$)
- Collector current
 I_{CM} : 500 mA
- Collector-base voltage
 $V_{(BR)CBO}$: 30 V
- Operating and junction temperature range
 T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$
- For general AF applications
- High collector current
- High current gain
- Low collector-emitter saturation voltage



SOT-23		
Dim	Min	Max
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.450	0.600
L	0.890	1.020
S	2.100	2.500
V	0.450	0.600
All Dimension in mm		

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

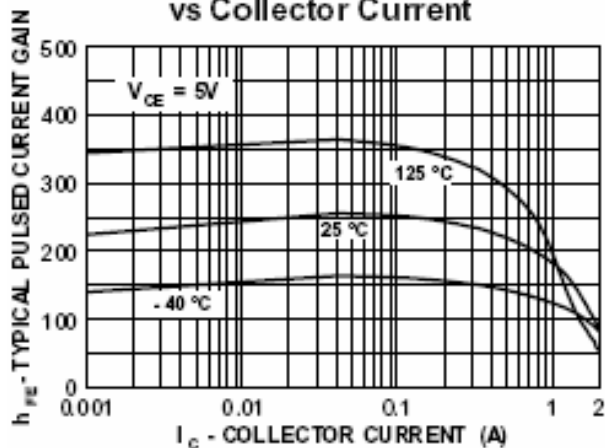
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=45V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=100mA$	100		600	
	$h_{FE(2)}$	$V_{CE}=1V, I_C=500mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			0.7	V
Base-emitter voltage & saturation voltage	V_{BE} &	$V_{CE}=1V, I_C=500mA$			1.2	V
	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$				
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA, f=100MHz$	100			MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$		10		pF

CLASSIFICATION OF $h_{FE(1)}$

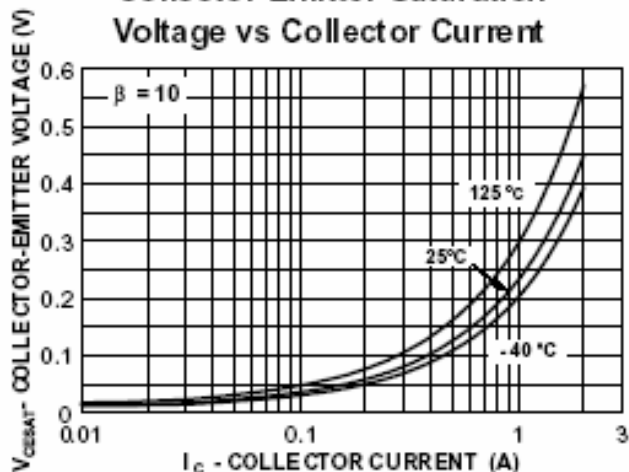
Rank	BC817-16	BC817-25	BC817-40
Range	100-250	160-400	250-600
Marking	6A	6B	6C

TYPICAL CHARACTERISTICS

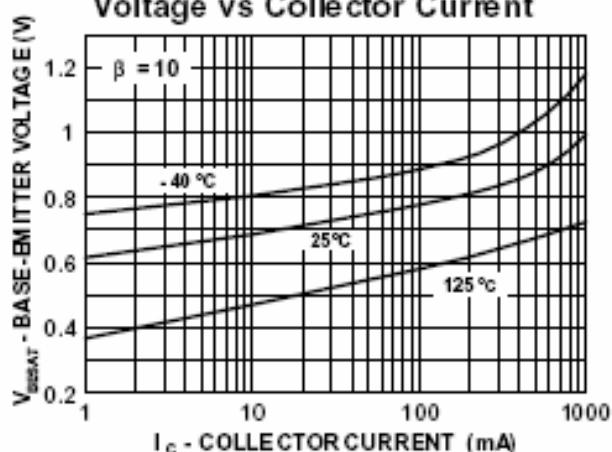
Typical Pulsed Current Gain
vs Collector Current



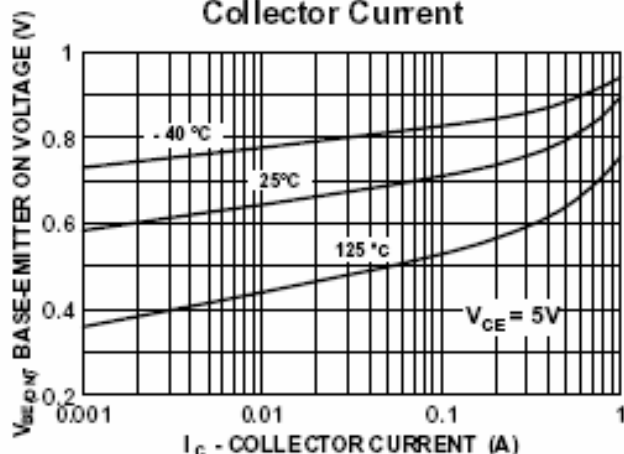
Collector-Emitter Saturation
Voltage vs Collector Current



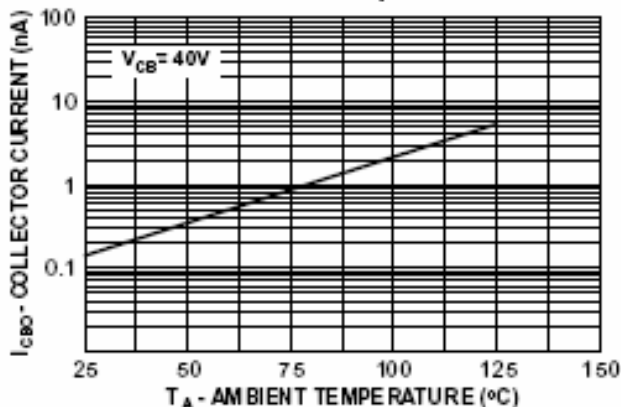
Base-Emitter Saturation
Voltage vs Collector Current



Base-Emitter ON Voltage vs
Collector Current



Collector-Cutoff Current
vs Ambient Temperature



Collector-Base Capacitance
vs Collector-Base Voltage

