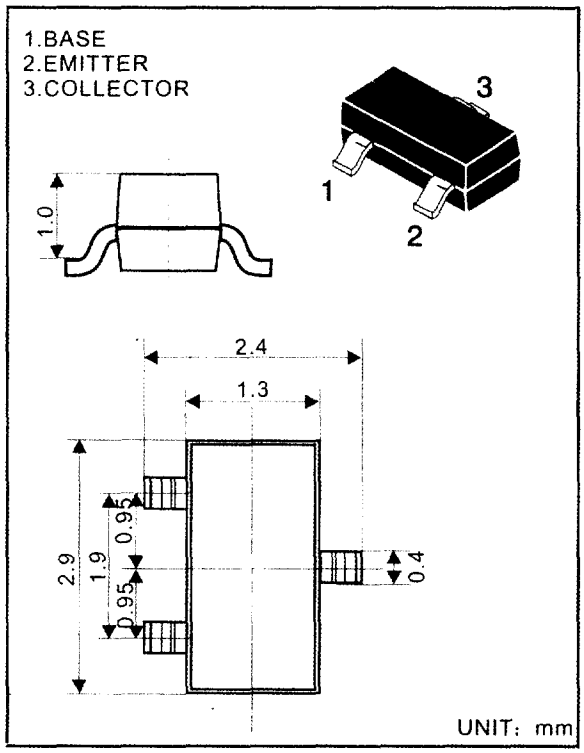
SOT-23 Plastic-Encapsulate Transistors

BC817-16/25/40LT1 TRANSISTOR (NPN)



FEATURES

Power dissipation

P_{CM}: 0.3 W (Tamb=25℃)

Collector current

I_{CM}: 0.5 A

Collector-base voltage

$V_{(BR)CBO}$:50V

Operating and storage junction temperature range

T_J,Tstg :-55℃ to+150℃

ELECTRICAL CHARACTERISTICS

(Tamp=25℃ unless otherwise specified)

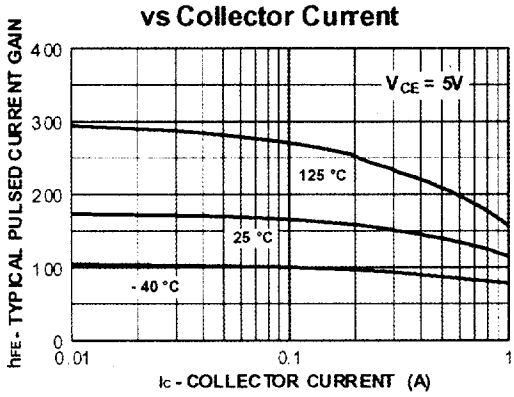
Parameter		Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage		$V_{(BR)CBO}$	I_C=10μA, I_E=0	50		V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	I_C=10mA, I_B=0	45		V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E=1μA, I_B=0	5		V
Collector cut-off current		I_{CBO}	V_{CB}=45V,I_E=0		0.1	μA
Collector cut-off current		I_{CEO}	V_{CE}=40V,I_B=0		0.2	μA
Emitter cut-off current		I_{EBO}	V_{EB}=4V, I_C=0mA		0.1	μA
DC current gain	BC817-16	H_{FE}	V_{CE}=1V, I_C=100mA	100	250	
	BC817-25			160	400	
	BC817-40			250	600	
Collector-emitter saturation voltage		V_{CEsat}	I_C=500mA,I_B=50mA		0.7	V
Base-emitter saturation voltage		V_{BEsat}	I_C=500mA,I_B=50mA		1.2	V
Transition frequency		f_T	V_{CE}=5V,I_C=10mA,f=100MHz	100		MHz

DEVICE MARKING : BC817-16LT1=6A; BC817-25LT1=6B; BC817-40LT1=6C

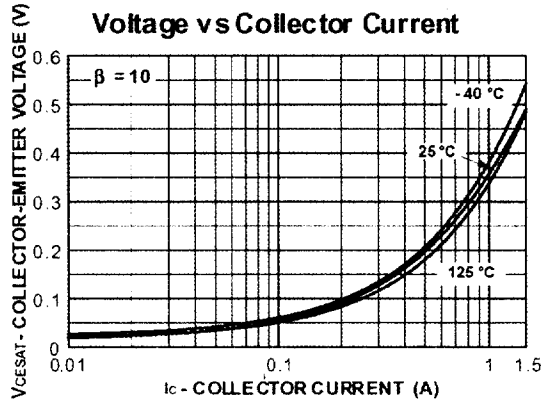
Typical Characteristics

BC817-16,25,40LT1

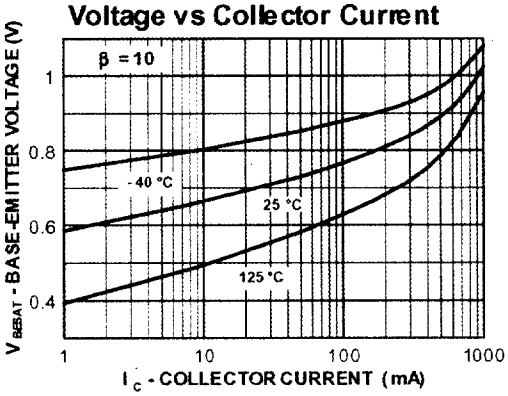
Typical Pulsed Current Gain vs Collector Current



Collector-Emitter Saturation Voltage vs Collector Current



Base-Emitter Saturation Voltage vs Collector Current



Gain Bandwidth Product vs Collector Current