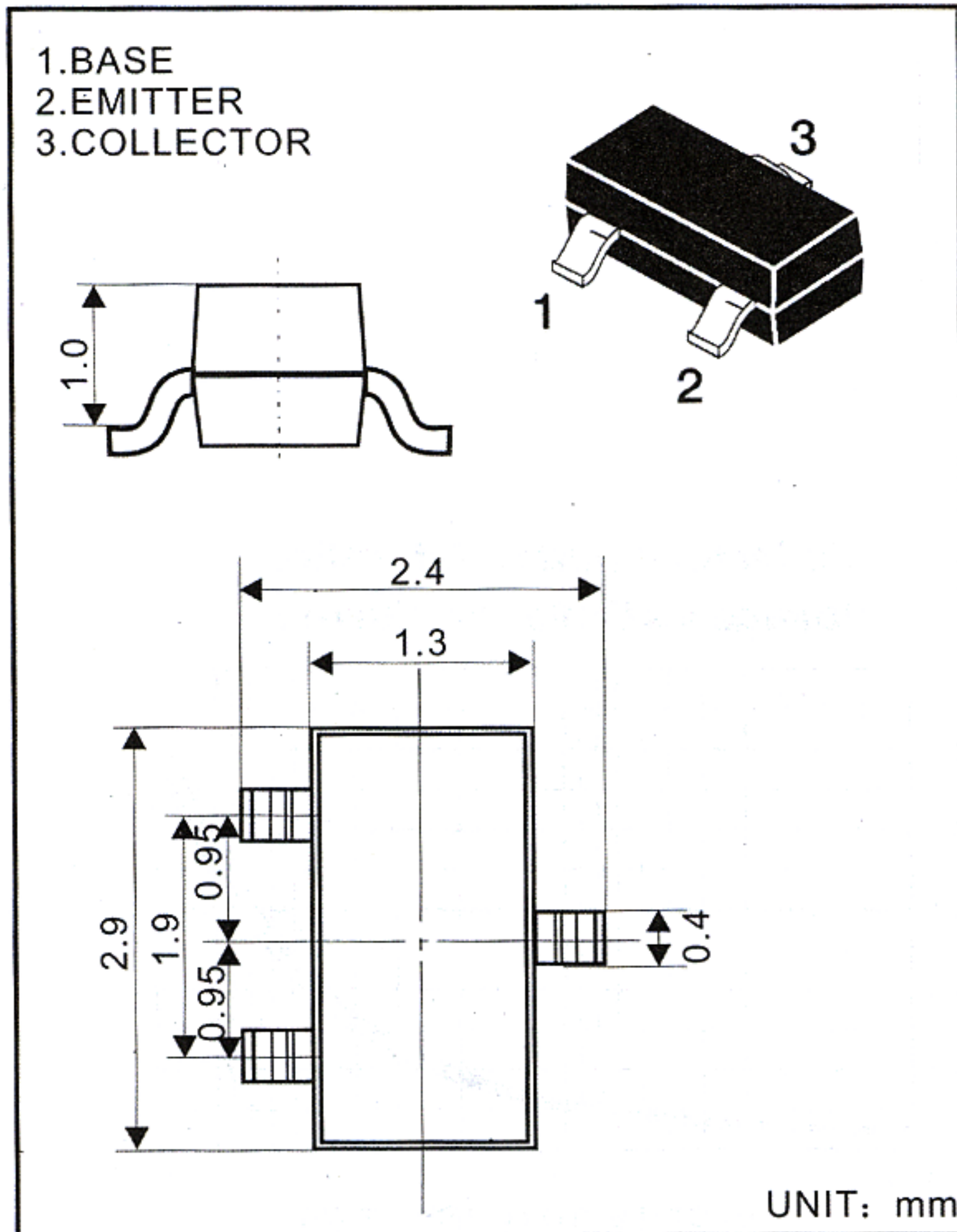


SOT-23 Plastic-Encapsulate Transistors

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



FEATURES

Power dissipation

P_{CM} : 0.3 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 0.5 A

Collector-base voltage

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

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

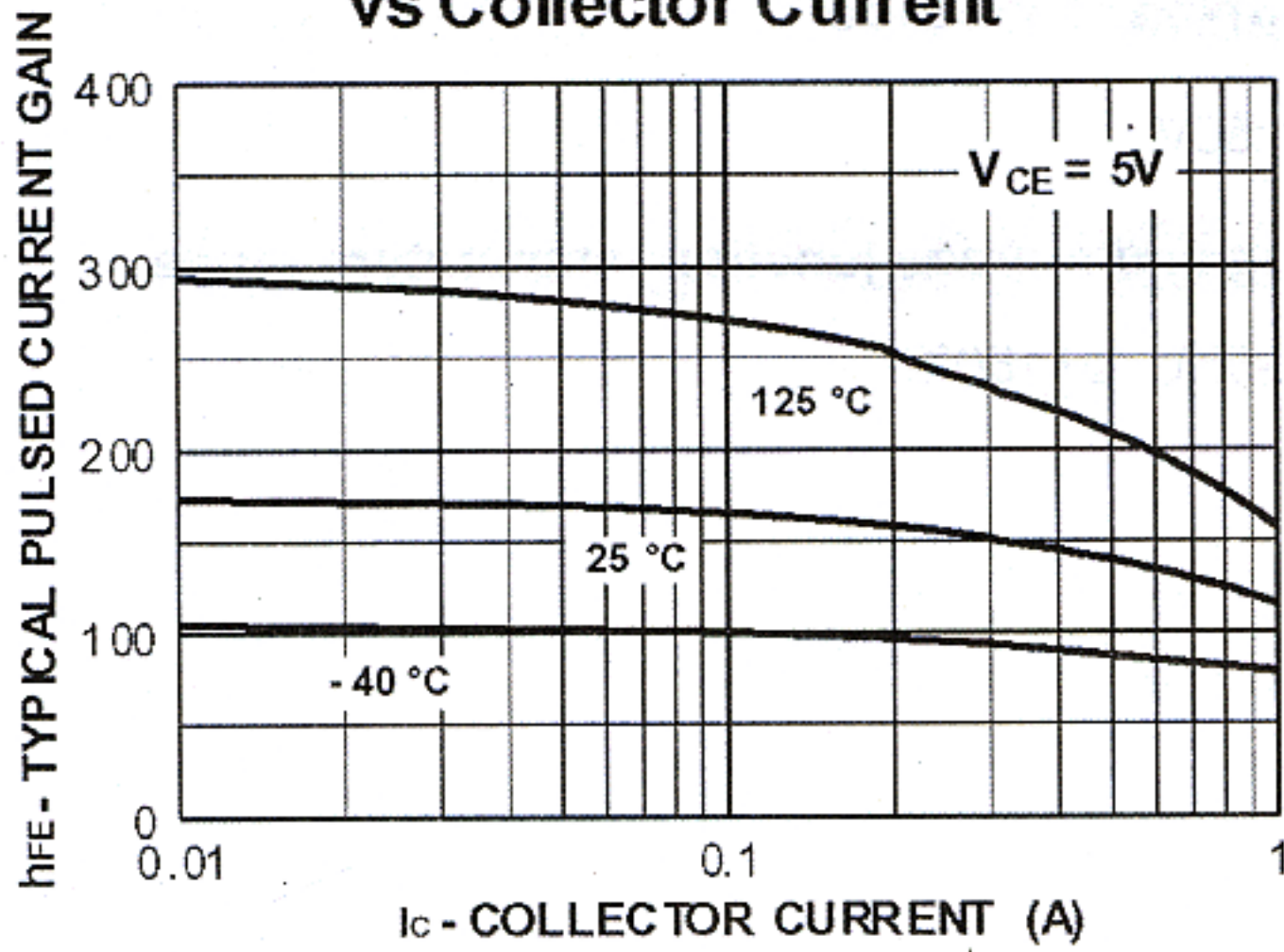
ELECTRICAL CHARACTERISTICS

($T_{amp}=25^{\circ}C$ unless otherwise specified)

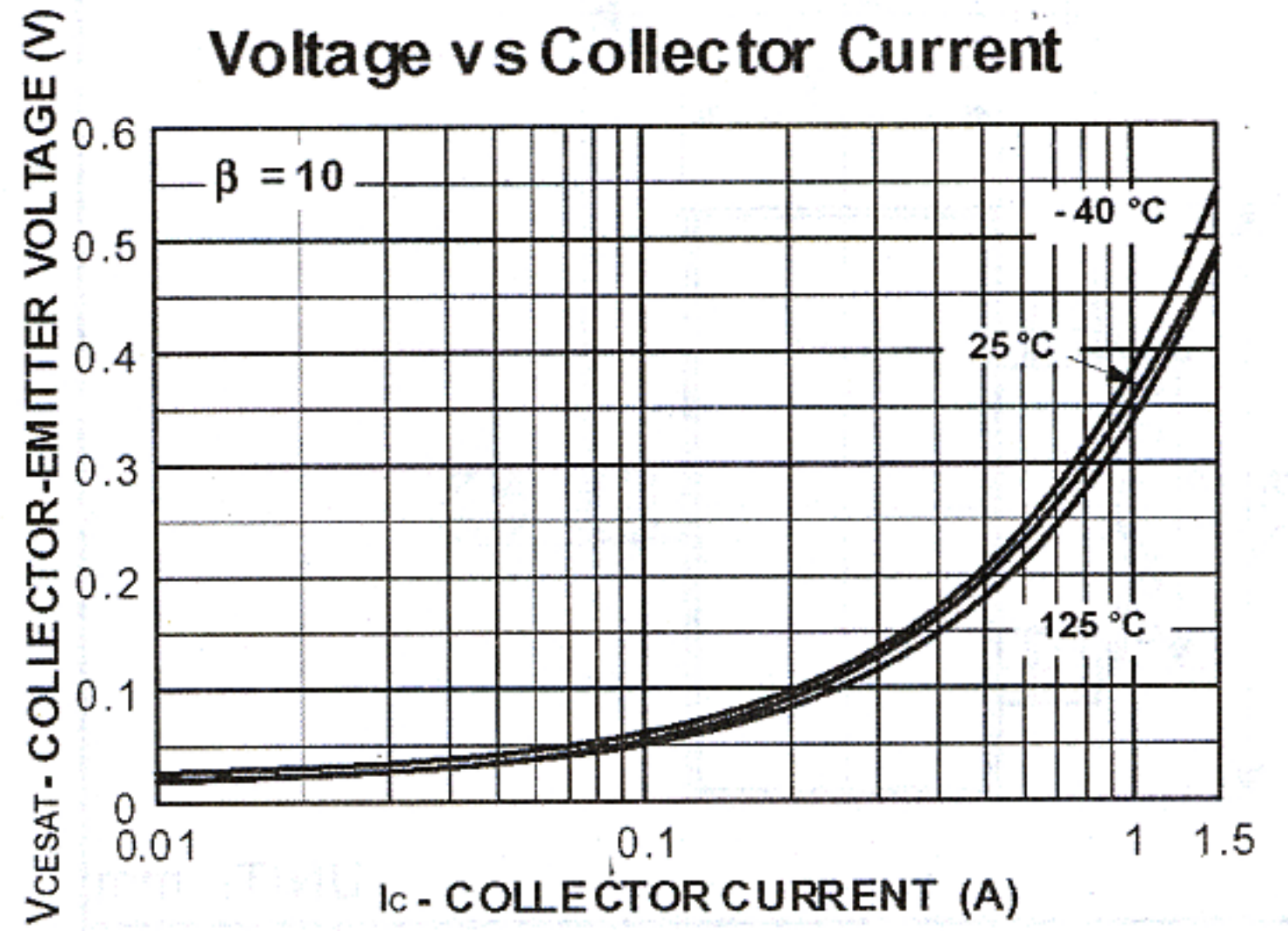
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	50		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	45		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\mu A, I_B=0$	5		V
Collector cut-off current	I_{CBO}	$V_{CB}=45V, I_E=0$		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	$V_{CE}=1V, I_C=100mA$	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

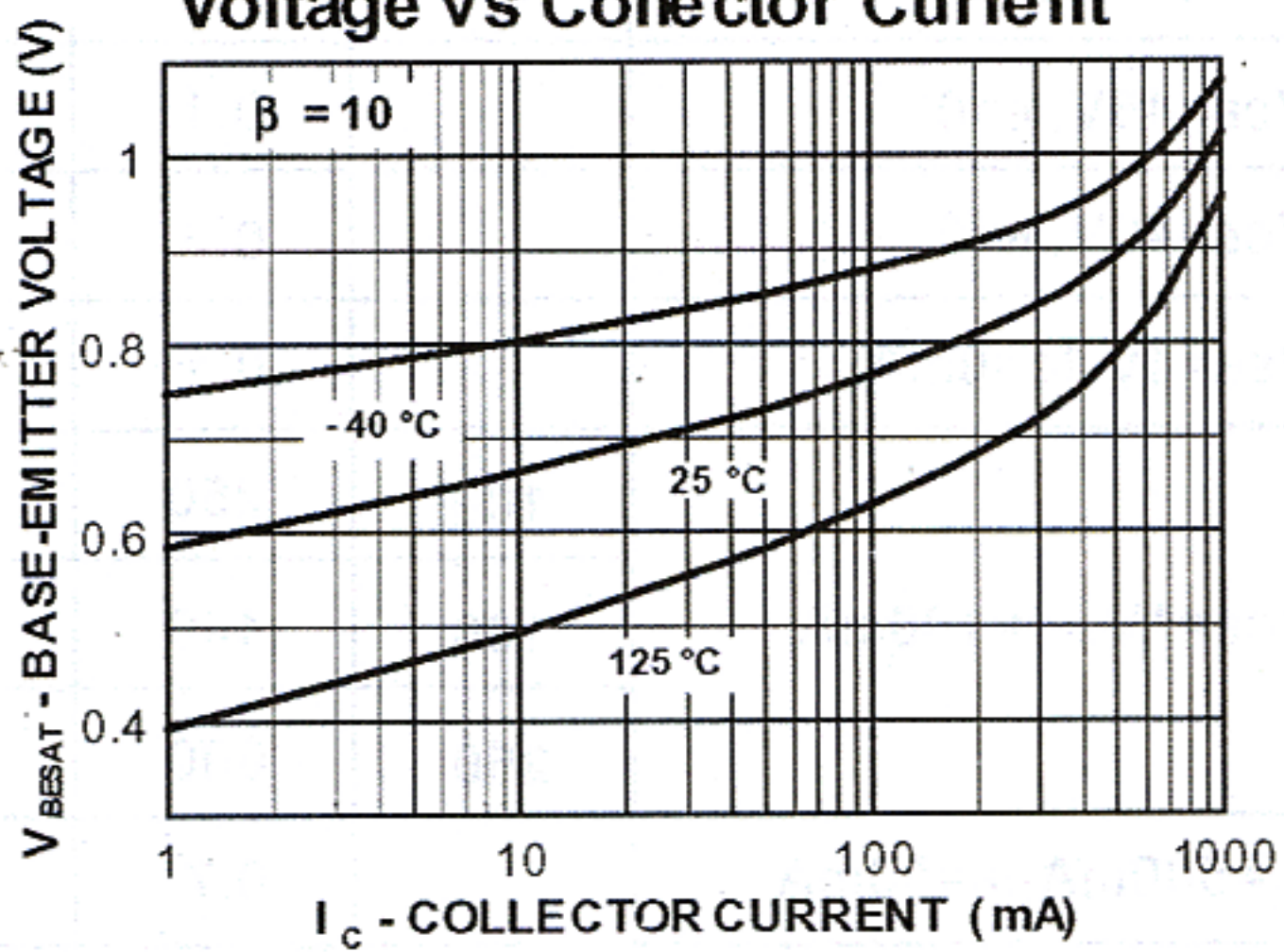
Typical Pulsed Current Gain vs Collector Current



Collector-Emitter Saturation Voltage vs Collector Current



Base-Emitter Saturation Voltage vs Collector Current



Gain Bandwidth Product vs Collector Current

