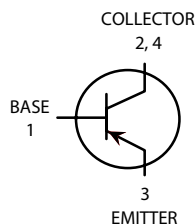
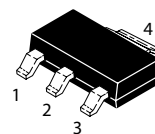


PNP Silicon Epitaxial Transistor

Pb Lead(Pb)-Free



1.BASE
2.COLLECTOR
3.EMITTER
4.COLLECTOR



SOT-223

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Rating	Symbol	Value	Unit
Collector to Base Voltage	V_{CBO}	-25	V
Collector to Emitter Voltage	V_{CEO}	-20	V
Collector to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-1.0	A
Total Device Dissipation $T_A=25^{\circ}\text{C}$	P_D	1.5	W
Junction Temperature	T_j	+150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-65 to +150	$^{\circ}\text{C}$

Device Marking

BCP69 = BCP69

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Max	Unit
Collector-Base Breakdown Voltage $I_C=-100\mu\text{A}$, $I_E=0$	BV_{CBO}	-25	-	-	V
Collector-Emitter Breakdown Voltage $I_C=-1\text{mA}$, $I_B=0$	BV_{CEO}	-20	-	-	V
Emitter-Base Breakdown Voltage $I_E=-10\mu\text{A}$, $I_C=0$	BV_{EBO}	-5.0	-	-	V
Collector Cut-Off Current $V_{CB}=-25\text{V}$, $I_E=0$	I_{CBO}	-	-	-10	μA
Emitter-Cut-Off Current $V_{EB}=-5\text{V}$, $I_C=0$	I_{EBO}	-	-	-10	μA

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

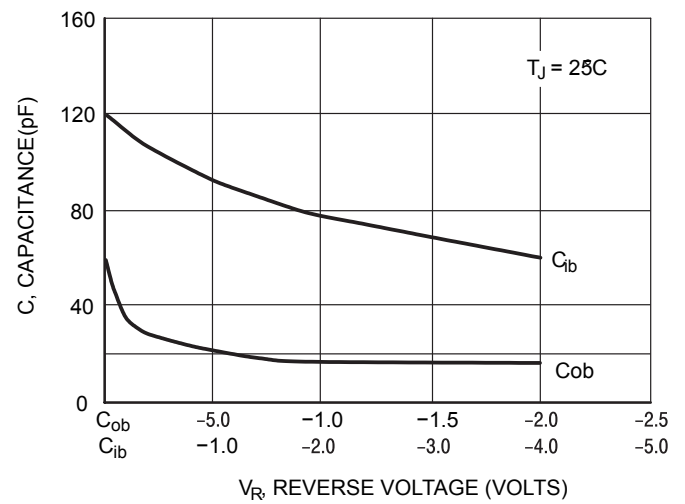
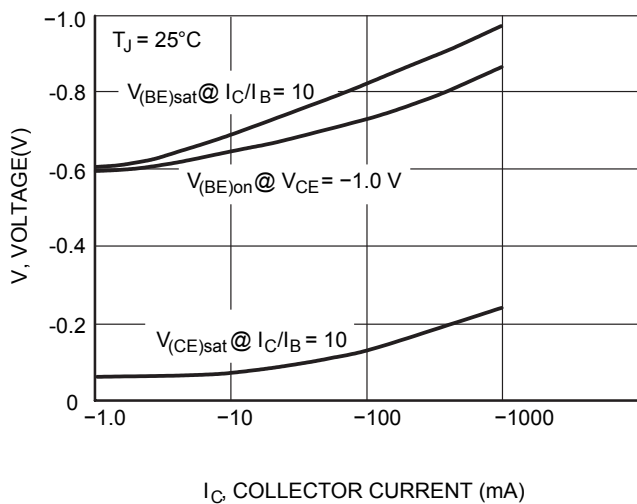
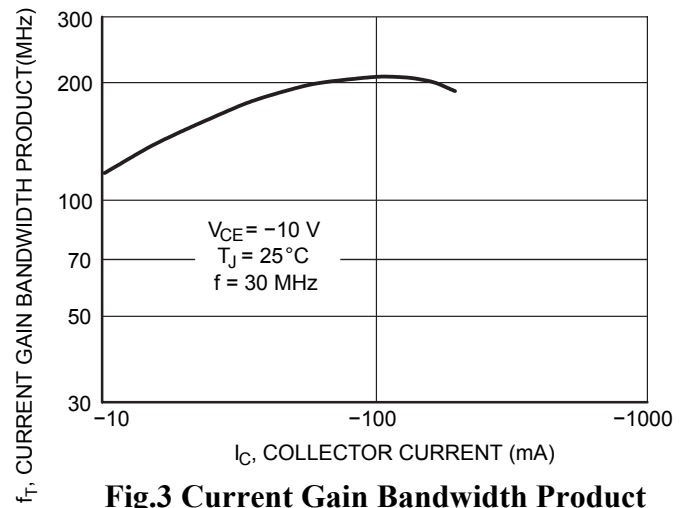
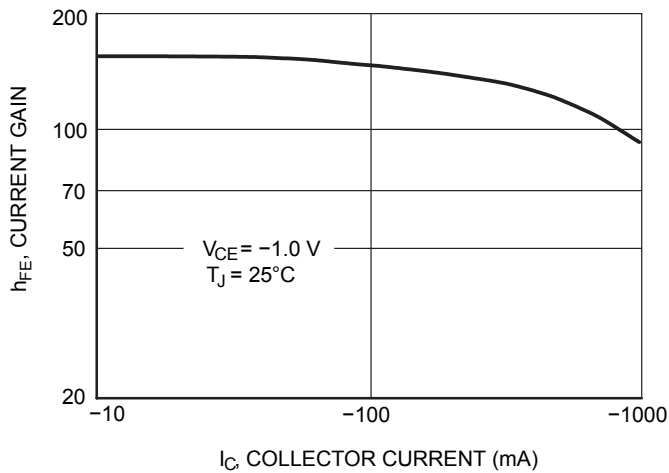
Characteristic	Symbol	Min	Typ	Max	Unit
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ON CHARACTERISTICS⁽¹⁾

DC Current Gain $V_{CE}=-10\text{V}$, $I_C=-5\text{mA}$ $V_{CE}=-1\text{V}$, $I_C=-500\text{mA}$ $V_{CE}=-1\text{V}$, $I_C=-1\text{A}$	h_{FE1} h_{FE2} h_{FE3}	50 85 60	- - -	- 375 -	-
Collector-Emitter Saturation Voltage $I_C=-1\text{A}$, $I_B=-100\text{mA}$	$V_{CE(sat)}$	-	-	-500	mV
Base-Emitter On Voltage $V_{CE}=-1\text{V}$, $I_C=-1\text{A}$	$V_{BE(on)}$	-	-	-1.0	V
Transition Frequency $V_{CE}=-10\text{V}$, $I_C=-100\text{mA}$, $f=50\text{MHz}$	f_T	-	60	-	MHz

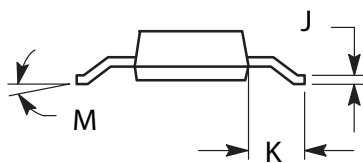
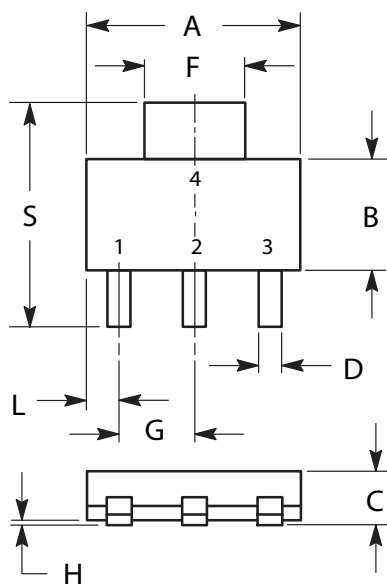
Note 1. Pulse Test : Pulse width $< 380\mu\text{s}$, Duty cycle $\leq 2\%$.

Typical Characteristics



SOT-223 Outline Dimensions

unit:mm



DIM	MILLIMETERS	
	MIN	MAX
A	6.30	6.70
B	3.30	3.70
C	1.50	1.75
D	0.60	0.89
F	2.90	3.20
G	2.20	2.40
H	0.020	0.100
J	0.24	0.35
K	1.50	2.00
L	0.85	1.05
M	0°	10°
S	6.70	7.30