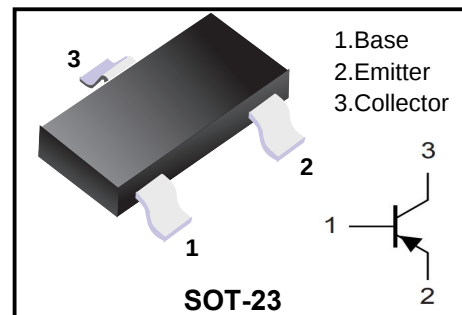


PNP Plastic-Encapsulate Transistors

FEATURES

- ◆Case: SOT-23
- ◆Epoxy meets UL-94 V-0 flammability rating and halogen free
- ◆Moisture Sensitivity Level 3
- ◆High temperature soldering guaranteed 260°C/10seconds at terminals



Marking Code

BSS5240	ZF
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Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

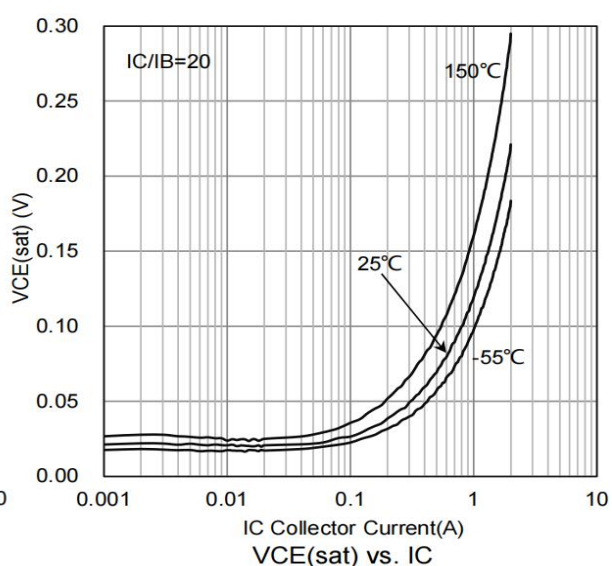
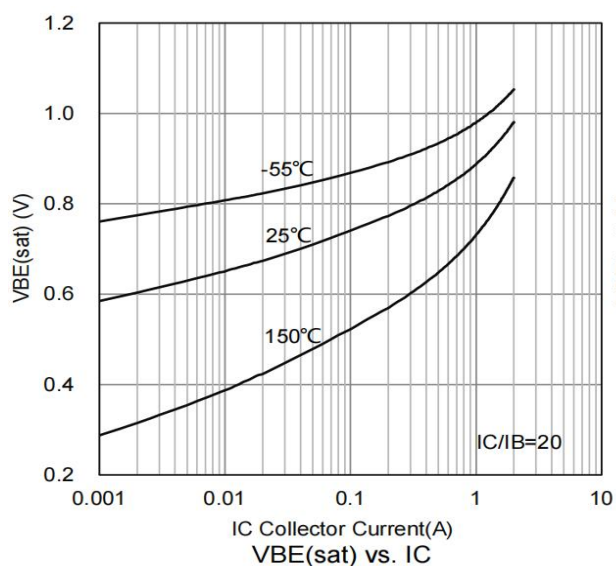
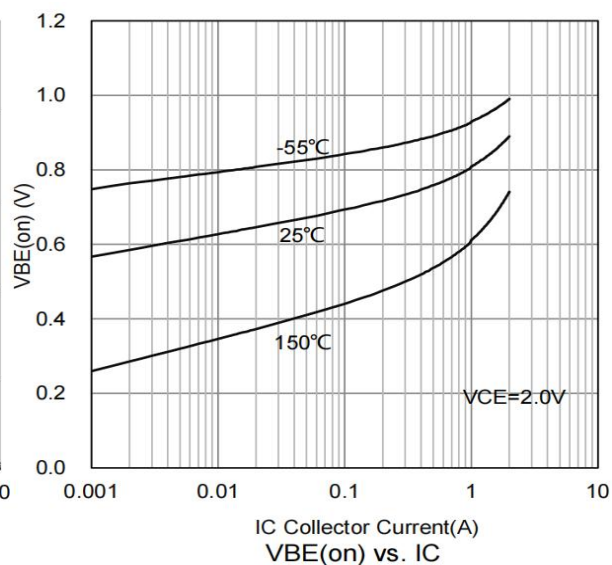
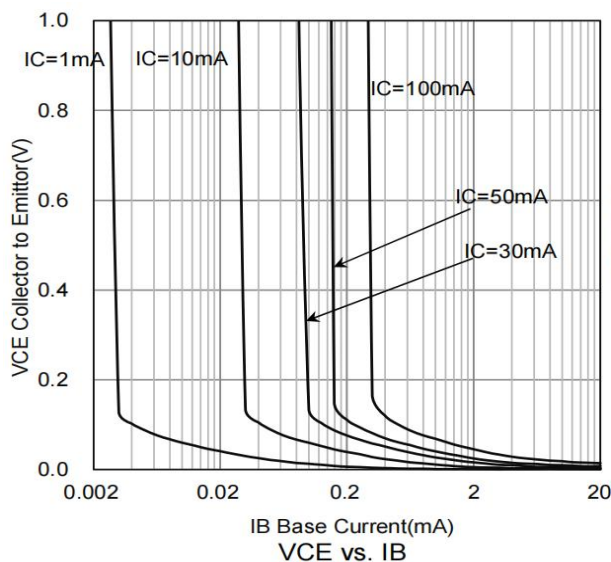
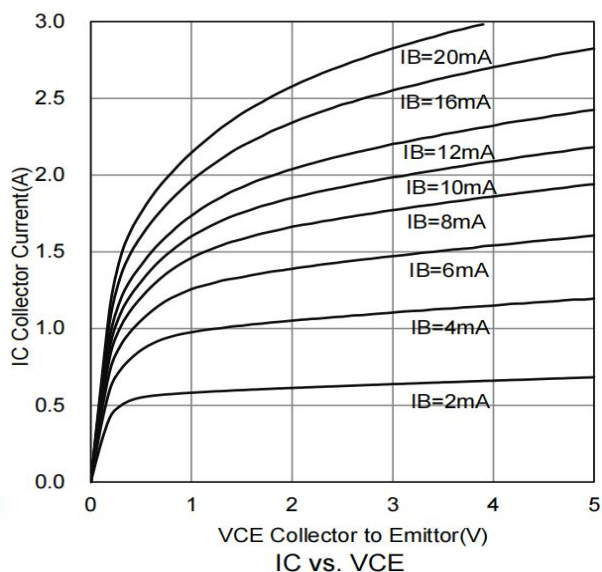
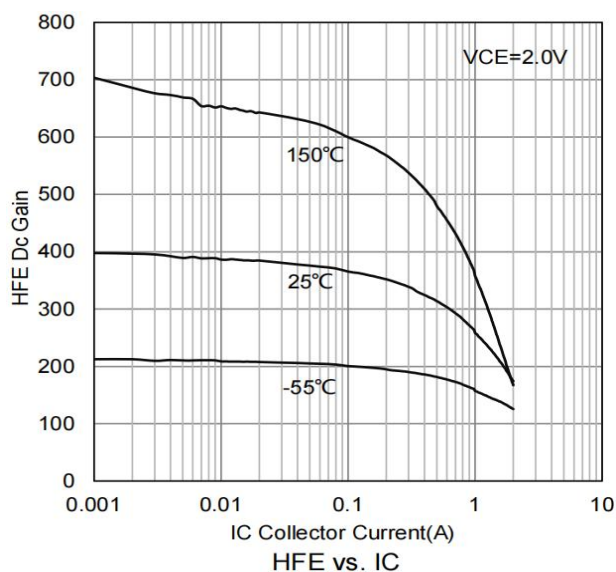
Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter -Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-2	A
Peak collector current(tp<1ms)	I_{CM}	-6	A
Power Dissipation	P_D	300	mW
Junction Temperature	T_j	-55-+150	°C
Storage Temperature	T_{stg}	-55-+150	°C
Thermal resistance From junction to ambient	$R_{\theta JA}$	417	°C/W

Electrical Characteristics(Ta=25°C unless otherwise noted)

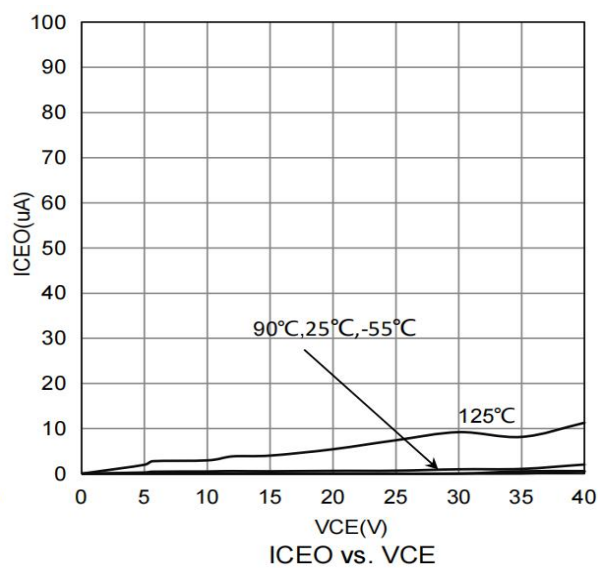
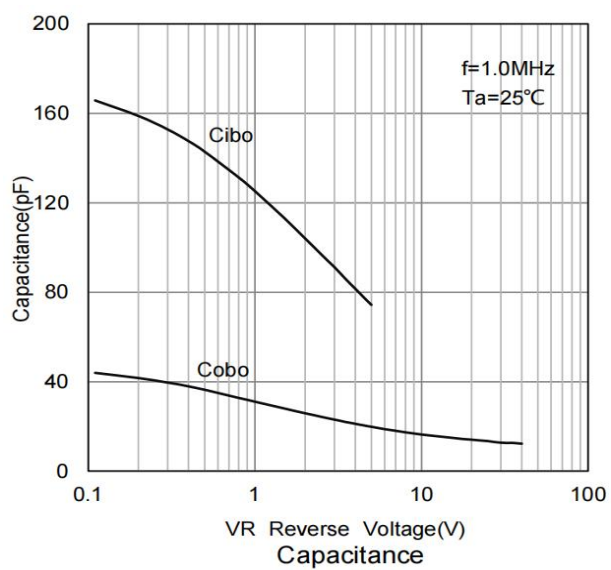
Parameter	Conditions	Symbol	Min	Max	Unit
Collector-base breakdown voltage	$I_C=-100\mu A, I_E=0$	$V_{(BR)CBO}$	-40		V
Collector-emitter breakdown voltage	$I_C=-10mA, I_B=0$	$V_{(BR)CEO}^*$	-40		V
Emitter-base breakdown voltage	$I_E=-100\mu A, I_C=0$	$V_{(BR)EBO}$	-5		V
Collector-Base cut-off current	$V_{CB}=-30V, I_E=0$	I_{CBO}		-100	nA
Emitter-Base cut-off current	$V_{EB}=-4V, I_C=0$	I_{EBO}		-100	nA
Collector-Emitter cut-off current	$V_{CE}=-40V, I_B=0$	I_{CEO}		-100	uA
DC current gain	$V_{CE}=-2V, I_C=-100mA$	$h_{FE(1)}^*$	300		
	$V_{CE}=-2V, I_C=-500mA$	$h_{FE(2)}^*$	260		
	$V_{CE}=-2V, I_C=-1A$	$h_{FE(3)}^*$	210		
	$V_{CE}=-2V, I_C=-2A$	$h_{FE(4)}^*$	100		
Collector-emitter saturation voltage	$I_C=-100mA, I_B=-1mA$	$V_{CE(sat)1}^*$		-100	mV
	$I_C=-500mA, I_B=-50mA$	$V_{CE(sat)2}^*$		-110	mV
	$I_C=-700mA, I_B=-15mA$	$V_{CE(sat)3}^*$		-225	mV
	$I_C=-1A, I_B=-50mA$	$V_{CE(sat)4}^*$		-225	mV
	$I_C=-2A, I_B=-200mA$	$V_{CE(sat)5}^*$		-350	mV
Base -emitter saturation voltage	$I_C=-2A, I_B=-200mA$	$V_{BE(sat)}^*$		-1.1	V
Base -emitter turn on voltage	$I_C=-100mA, V_{CE}=-2V$	$V_{BE(on)}^*$		-0.75	V
Transition frequency	$V_{CE}=-10V, I_C=-100mA, f=100MHz$	f_T	100		MHz
Collector output capacitance	$V_{CB}=-10V, I_E=0, f=1MHz$	C_{ob}		28	pF

*Pulse test: pulse width≤300us, duty cycle≤2.0%

Typical Characteristics



Typical Characteristics



Ordering information

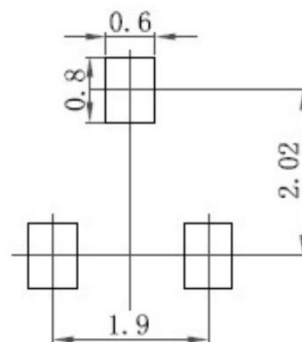
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
e	1.9		75	
e1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



Disclaimer

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