

BC860

Rev.F Apr.-2017

SOT-23

PNP

Silicon PNP transistor in a SOT-23 Plastic Package.

$V_{CE(sat)}$

High current gain, Low collector-emitter saturation voltage.

General pow-emT4 aMDifimT4 pMDicion v

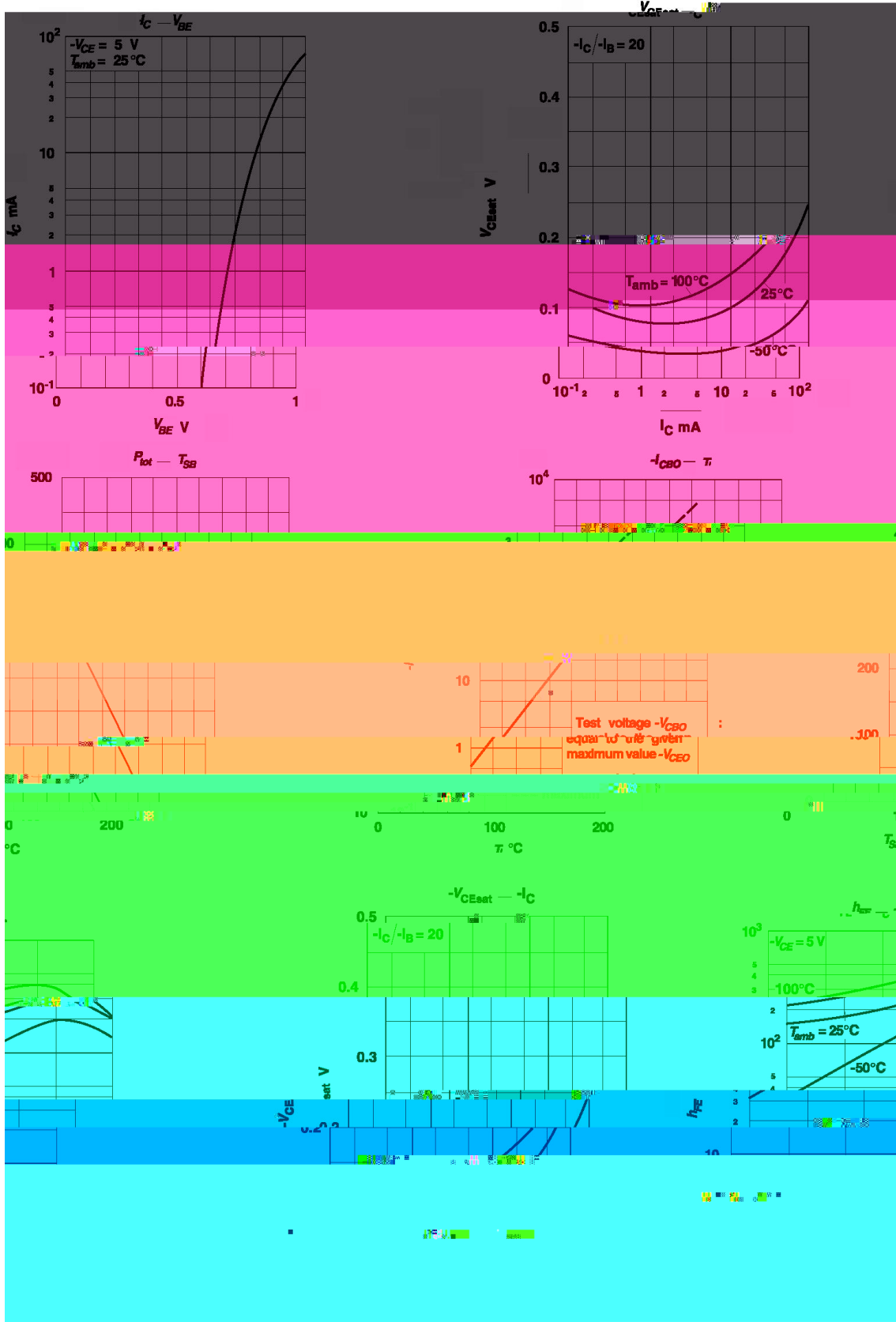
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-100	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-10mA$ $I_B=0$	-45			V
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-10\mu A$ $I_E=0$	-50			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-10\mu A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30V$ $I_E=0$			-0.015	μA
DC Current Gain	h_{FE}	$V_{CE}=-5.0V$ $I_C=-2.0mA$	125		800	
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=-10mA$ $I_B=-0.5mA$		-0.075	-0.3	V
	$V_{CE(sat)(2)}$	$I_C=-100mA$ $I_B=-5.0mA$		-0.25	-0.65	V
Base to Emitter Saturation Voltage	$V_{BE(sat)(1)}$	$I_C=-10mA$ $I_B=-0.5mA$		-0.7		V
	$V_{BE(sat)(2)}$	$I_C=-100mA$ $I_B=-5.0mA$		-0.85		V
Base to Emitter Voltage	$V_{BE(1)}$	$V_{CE}=-5.0V$ $I_C=-2.0mA$	-0.6	-0.65	-0.75	V
	$V_{BE(2)}$	$V_{CE}=-5.0V$ $I_C=-10mA$			-0.82	V
Transition Frequency	f_T	$V_{CE}=-5.0V$ $f=100MHz$ $I_C=-10mA$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$ $f=1.0MHz$ $I_E=0$		4.5		pF
Noise Figure	NF	$V_{CE}=-5.0V$ $R_g=10K$ $I_C=-200\mu A$ $f=1.0KHz$			4.0	dB

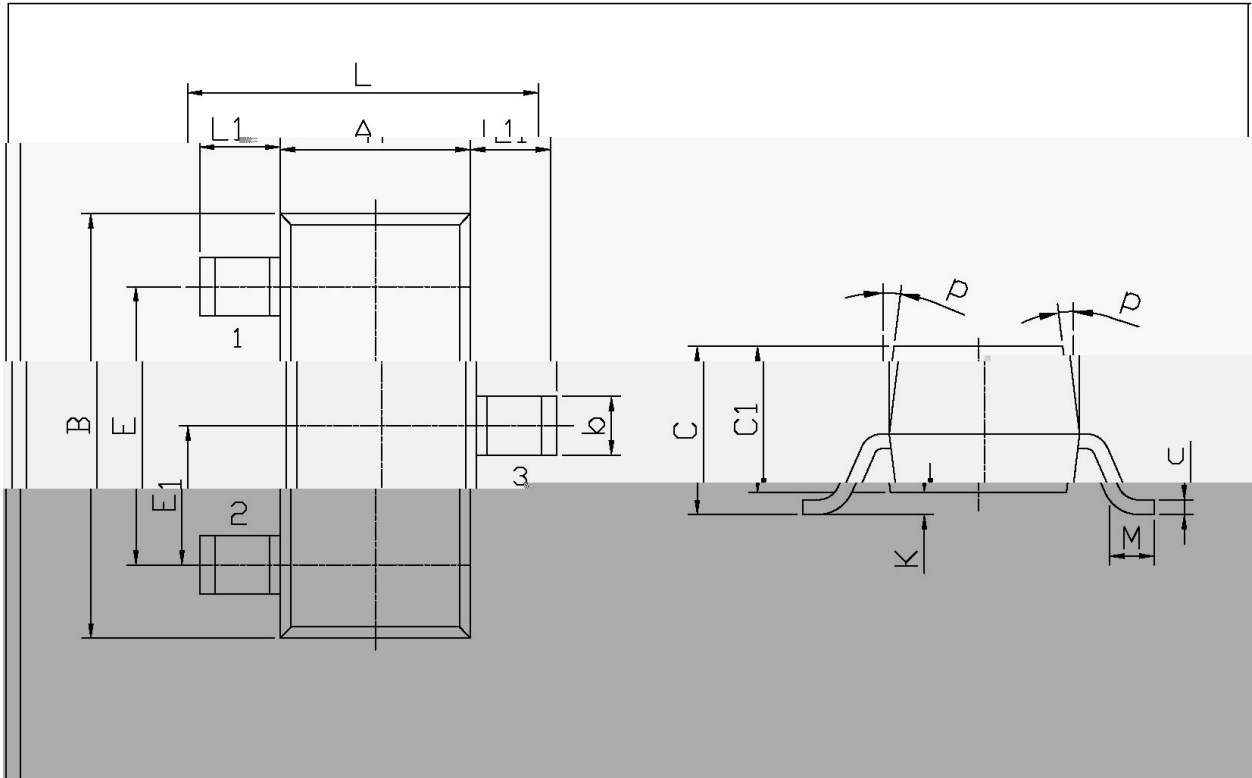
/ Electrical Characteristic Curve



/ Package Dimensions

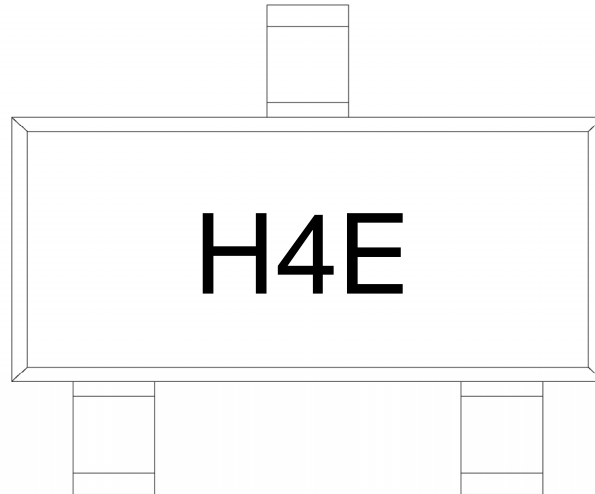
SOT-23

单位: mm



Symbol	Dimensions In. Millimeters		Symbol	Dimensions In. Millimeters	
	Min	Max		Min	Max
L	0.9	1.3	L1	0.4	0.6
A1	0.4	0.6	A2	0.4	0.6
B	0.98	1.02	B1	0.4	0.6
E	0.9	1.0	E1	0.4	0.6
E1	0.4	0.6	b	0.1	0.2
C	0.8	1.0	C1	0.4	0.6
p	45°	60°	K	0.1	0.2
M	0.1	0.2	U	0.1	0.2

/ Marking Instructions



H

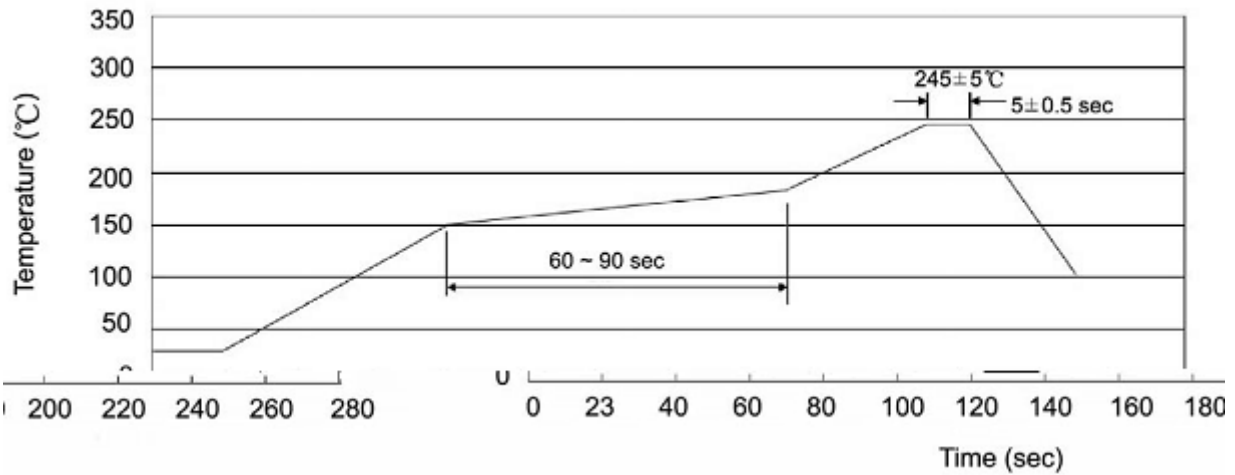
4E

Note:

H: Company Code.

4E: Product Type Code

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Note:

- | | | | | | |
|---|-------|-----|----|-----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices