

/ Descriptions

SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

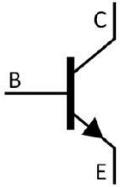
/ Features

Low $V_{CE(sat)}$, high current, HF product.

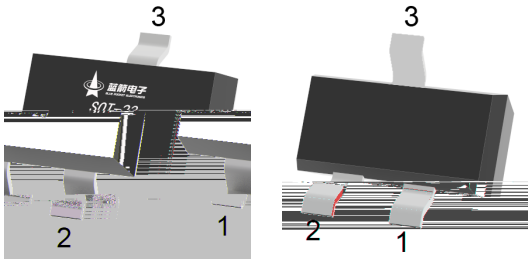
/ Applications

General purpose switching and muting, LCD back-lighting, supply line switching circuits.

/ Equivalent Circuit



/ Pinning



PIN 1 Base PIN 2 Emitter PIN 3 Collector

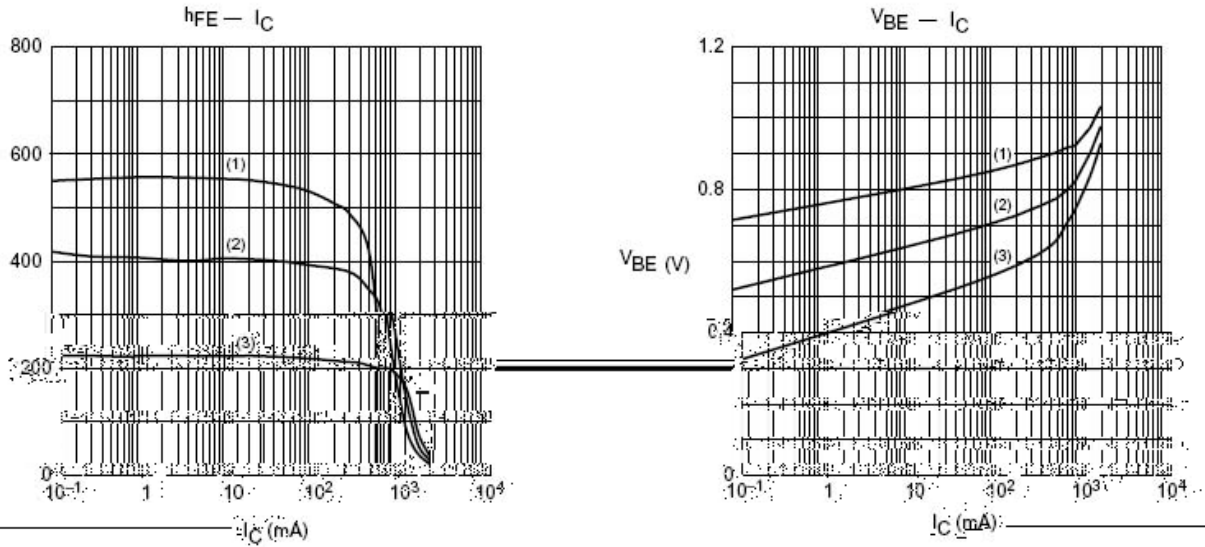
/ h_{FE} Classifications & Marking

h_{FE} Range	>200
Marking	HU5

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Peak Collector Current	I_{CM}	2	A
Base Current	I_B	0.3	A
Peak Base Current	I_{BM}	1	A
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

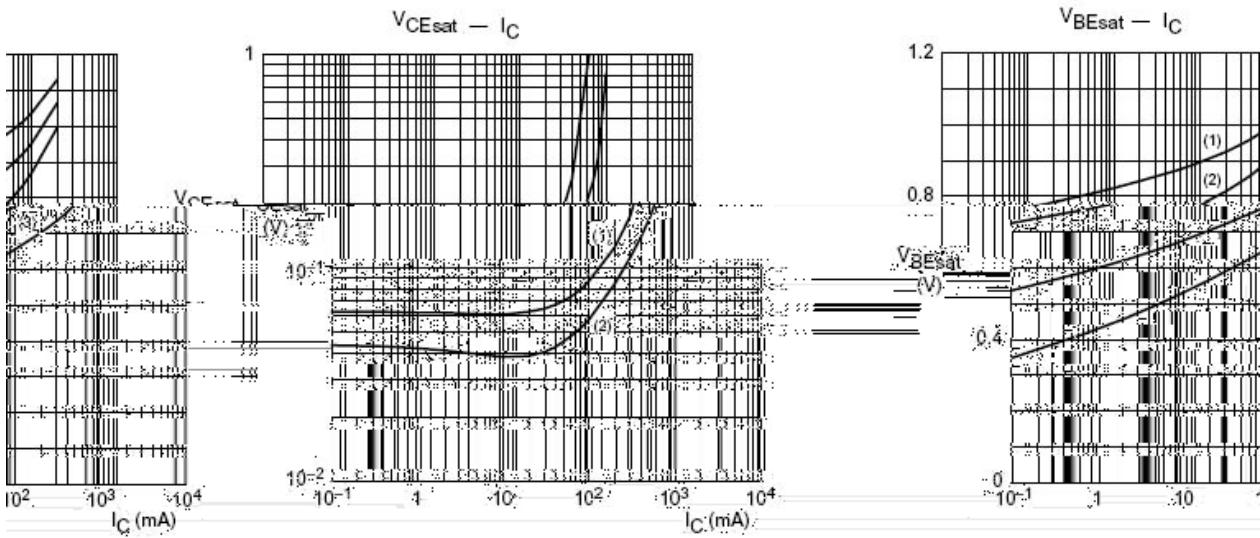
Parameter	Symbol	Test Conditions	Min	Typ	Max
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/ Electrical Characteristic Curve



$V_{CE} = 5V$
(1) $T_{amb} = 100^{\circ}C$.
(2) $T_{amb} = 25^{\circ}C$.
(3) $T_{amb} = -55^{\circ}C$.

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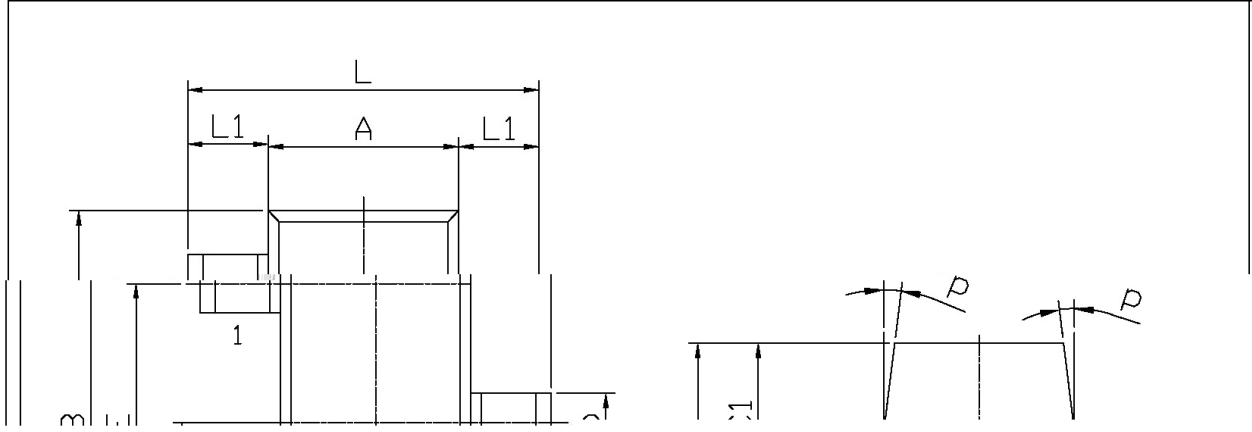
$T_{amb} = 25^{\circ}C$.
(1) $I_C/I_B = 100$.
(2) $I_C/I_B = 50$.

$I_C/I_B = 20$.
(1) $T_{amb} = -55^{\circ}C$.
(2) $T_{amb} = 25^{\circ}C$.
(3) $T_{amb} = 100^{\circ}C$.

/ Package Dimensions

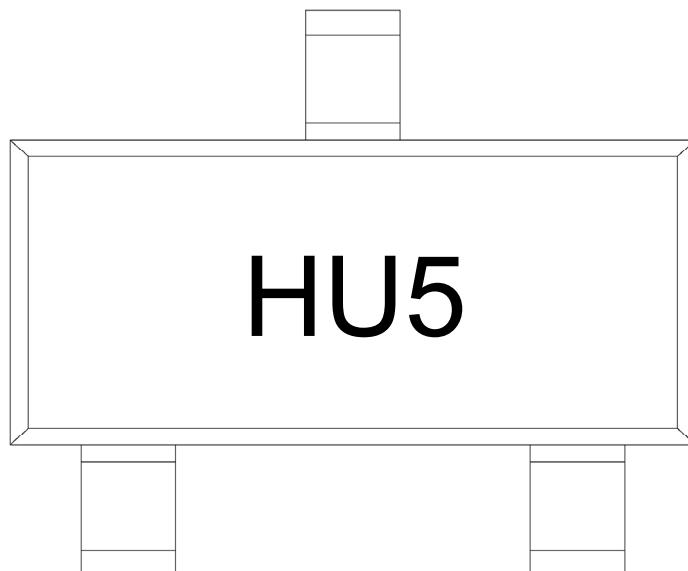
SOT-23

单位: mm



L	2.2	2.7	C	1.30Max
L1	0.45	0.65	C1	0.90 1.20
A	1.15	1.50	K	0.05 0.20
B	2.70	3.10	M	0 0.10
E	1.70	2.10	P	0.20MIN 7°
E1	0.85	1.05		
b	0.35	0.55		

/ **Marking Instructions**



H

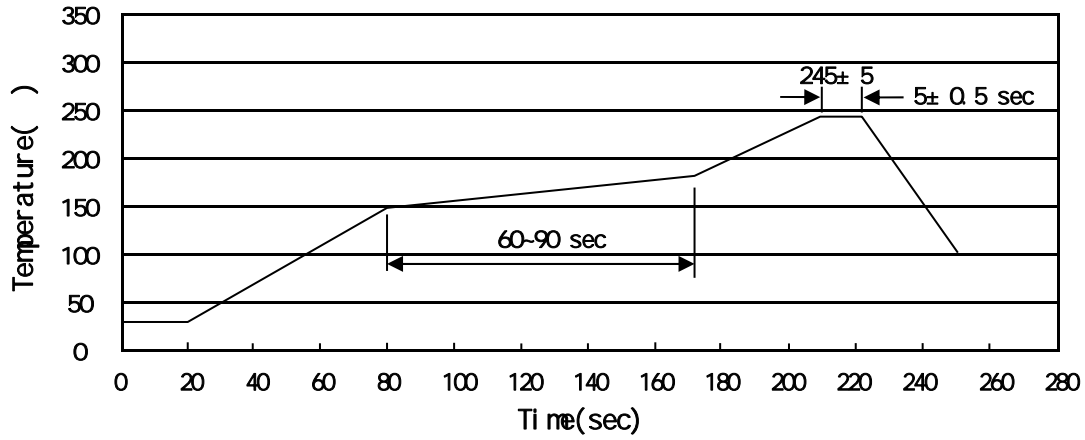
U5

Note:

H Company Code

U5 Product Type Code

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|----|-----------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , 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	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

/ Notices