

/ Descriptions

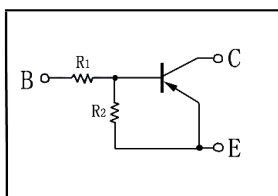
Silicon PNP Digital transistor in a SOT-23 Plastic Package.

/ Features

With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process.

/ Applications

Switching, inverter circuit, interface circuit and driver circuit applications.

/ Equivalent Circuit**/ Pinning**

PIN 1 Base PIN 2 Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

Marking	H15
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/ Absolute Maximum Ratings(Ta=25)

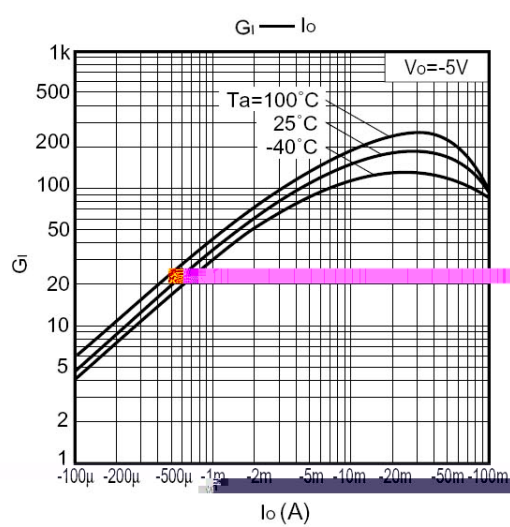
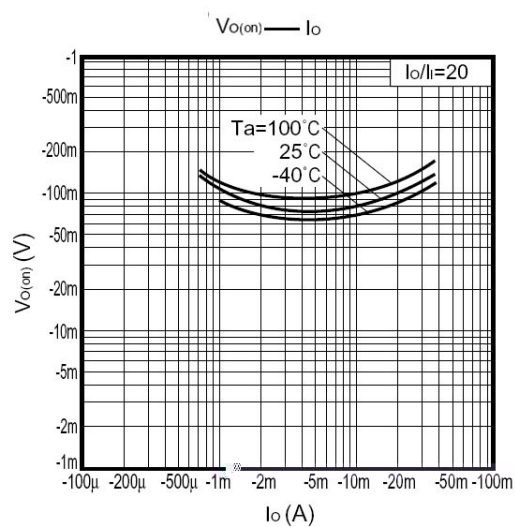
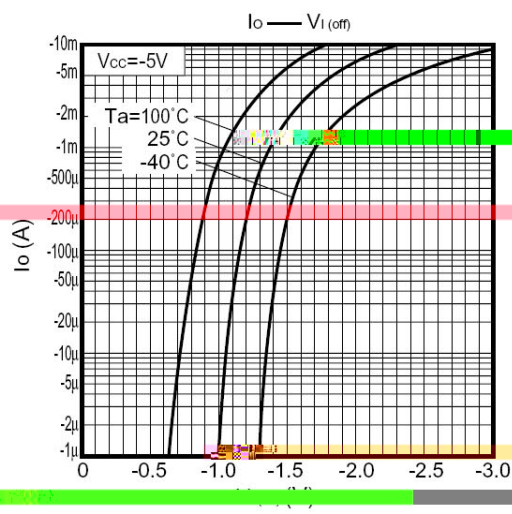
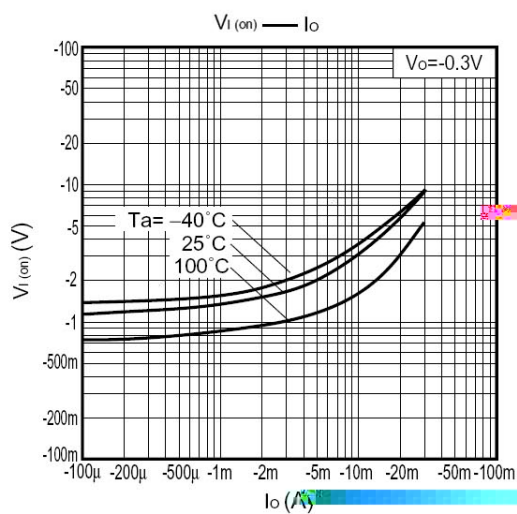
Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40	V
		10	V
Output Current	I_C	-30	mA
	I_O	-100	mA
Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage(OFF)	$V_{I(off)}$	$V_{CC}=-5.0V$ $I_O=-100$ A			-0.5	V
Input Voltage(ON)	$V_{I(on)}$	$V_O=-0.2V$ $I_O=-5.0mA$	-3.0			V
Output Voltage	$V_{O(on)}$	$I_O=-10mA$ $I_I=-0.5mA$		-0.1	-0.3	V
Input Current	I_I	$V_I=-5.0V$			-0.36	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=-50V$ $V_I=0V$			-0.5	μA
DC Current Gain	G_I	$V_O=-5.0V$ $I_O=-5.0mA$	56			
Transition Frequency	f_T	$V_{CE}=-10V$ $I_E=5.0$ mA $f=100MHz$		250		MHz
Resistance1	R_1		15.4	22	28.6	K Ω
Resistance Ratio	R_2/R_1		0.8	1	1.2	



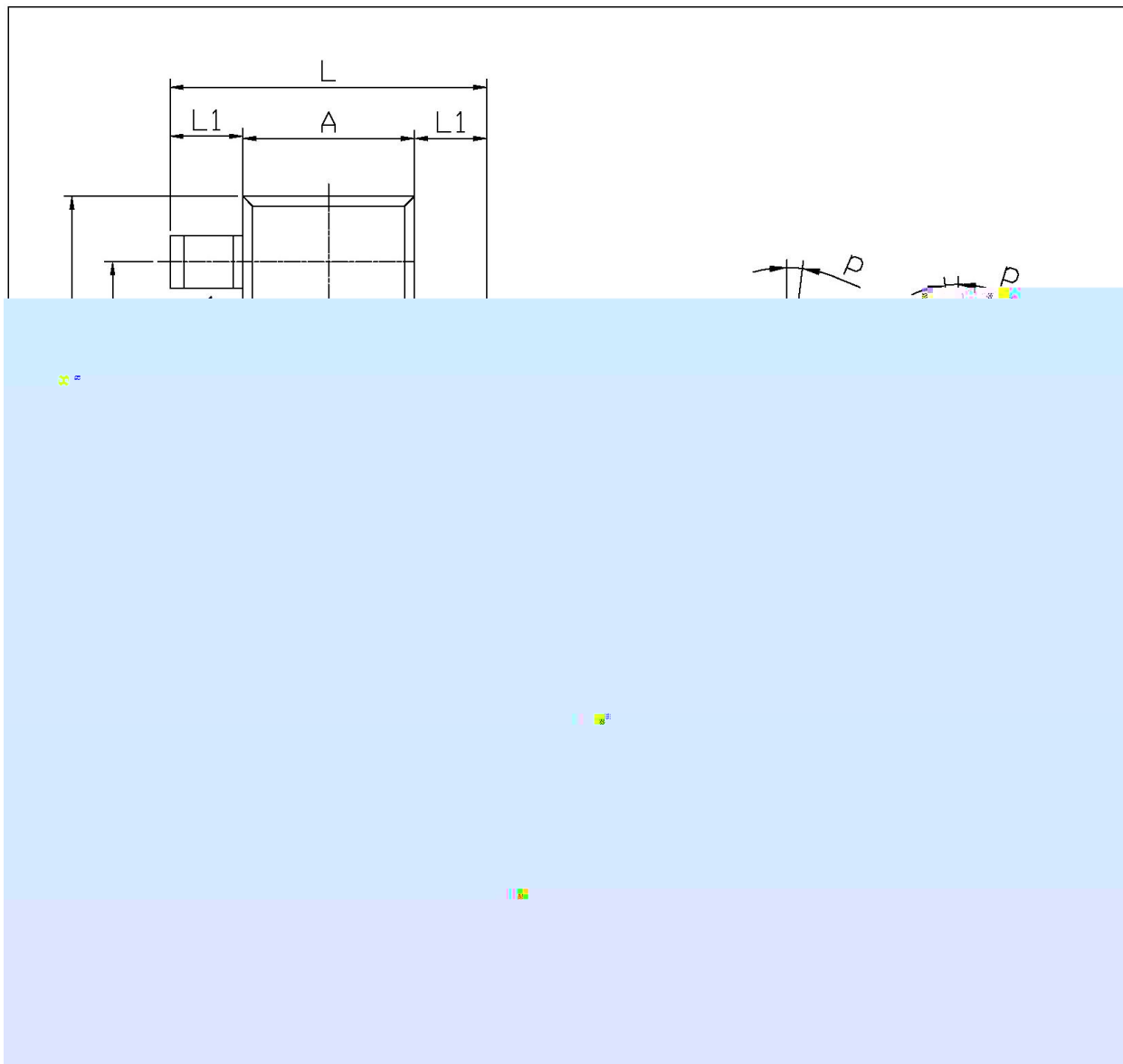
/ Electrical Characteristic Curve



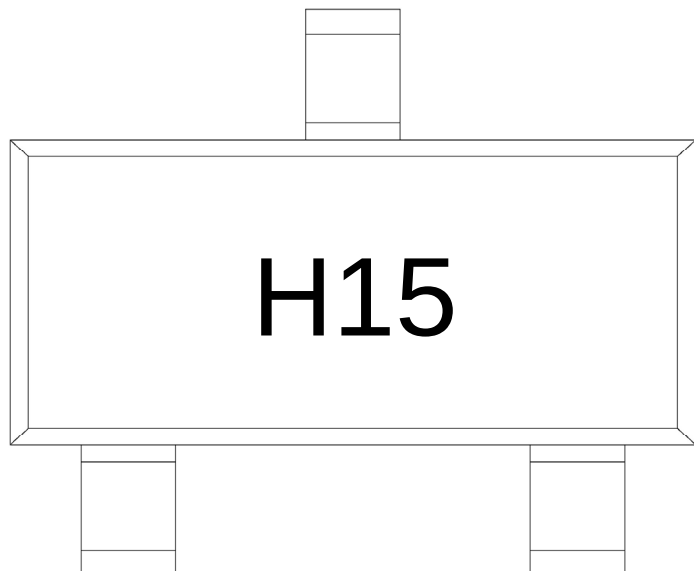
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



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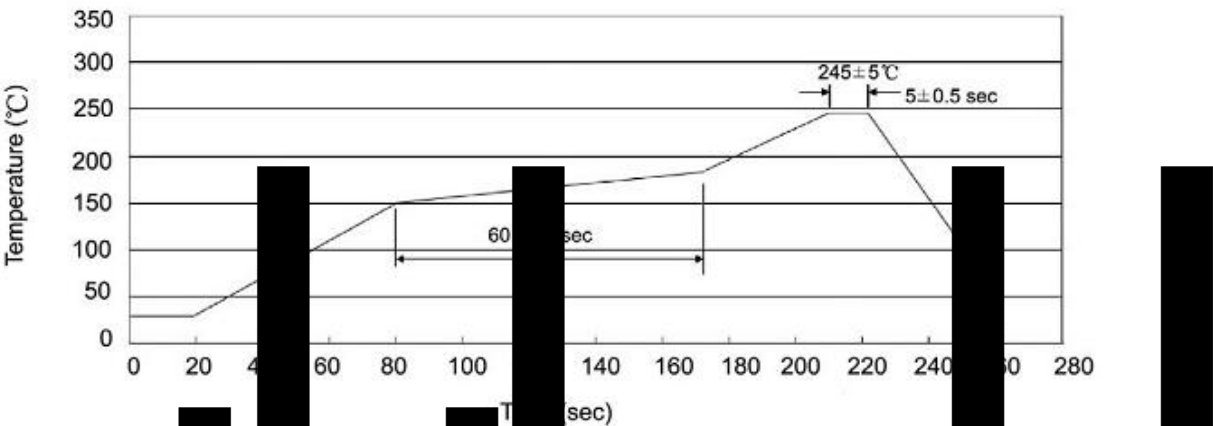
Note:

Company Code

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Product Type Code

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



Note:

1. Preheating: 150~180 °C, Time: 60~90 sec
2. Peak Temp.: 245 ± 5 °C, Duration: 5 ± 0.5 sec
3. Cooling Speed: 2~10 °C/sec.

Resistance to Soldering Heat Test Conditions

Temp.: 260±5 °C, 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)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱	盒	箱	

/ Notices