/ Descriptions

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

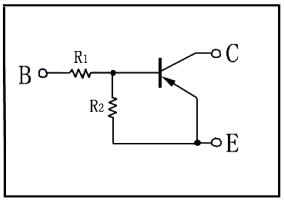
/ Features

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

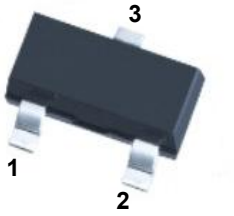
/ Applications

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

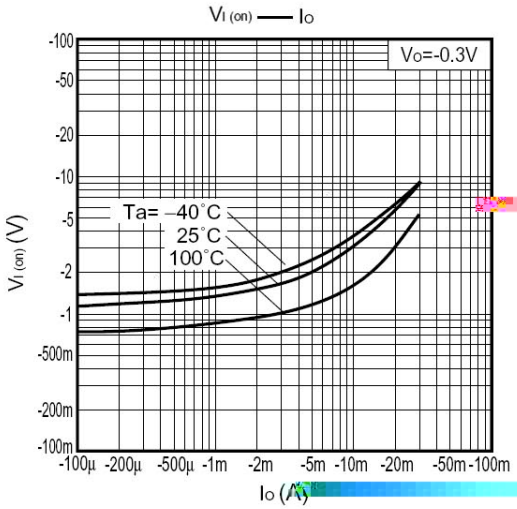
/ Absolute Maximum Ratings(Ta=25)

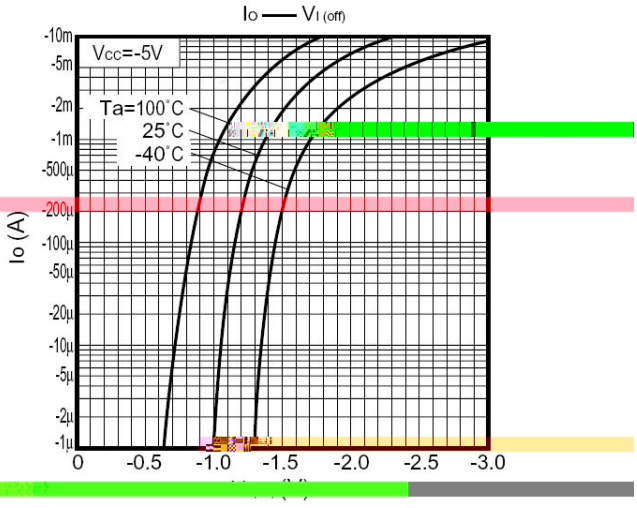
Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40	V
		10	V
Output Current	I_C	-30	mA
	I_O	-100	mA
Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

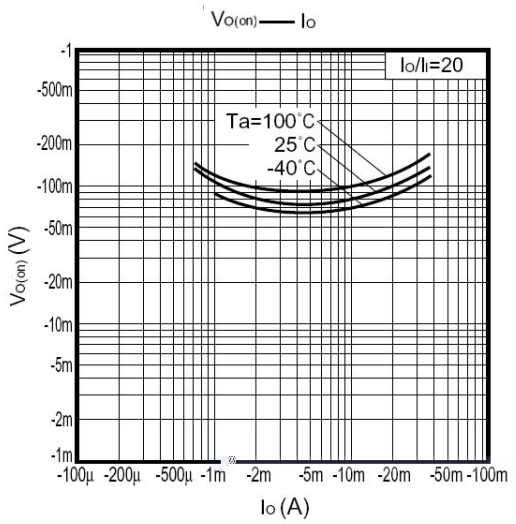
/ Electrical Characteristics(Ta=25)

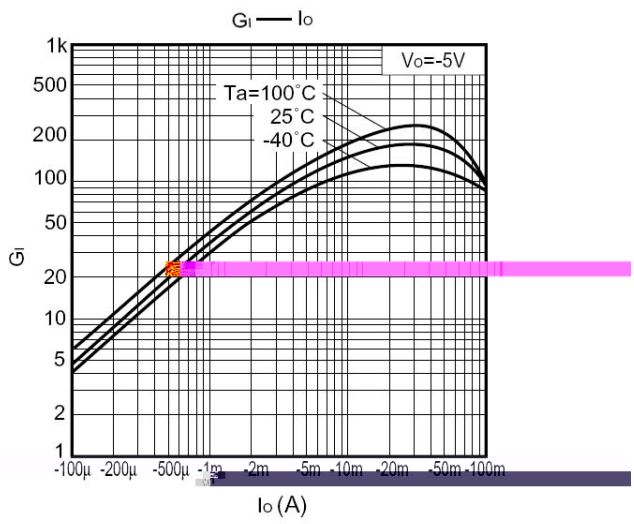
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage(OFF)	$V_{I(off)}$	V_{CC}=-5.0V I_O=-100 A			-0.5	V
Input Voltage(ON)	$V_{I(on)}$	V_O=-0.2V I_O=-5.0mA	-3.0			V
Output Voltage	$V_{O(on)}$	I_O=-10mA I_I=-0.5mA		-0.1	-0.3	V
Input Current	I_I	V_I=-5.0V			-0.36	mA
Output Cut-off Current	$I_{O(off)}$	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	KΩ
Resistance Ratio	R_2/R_1		0.8	1	1.2	

/ Electrical Characteristic Curve



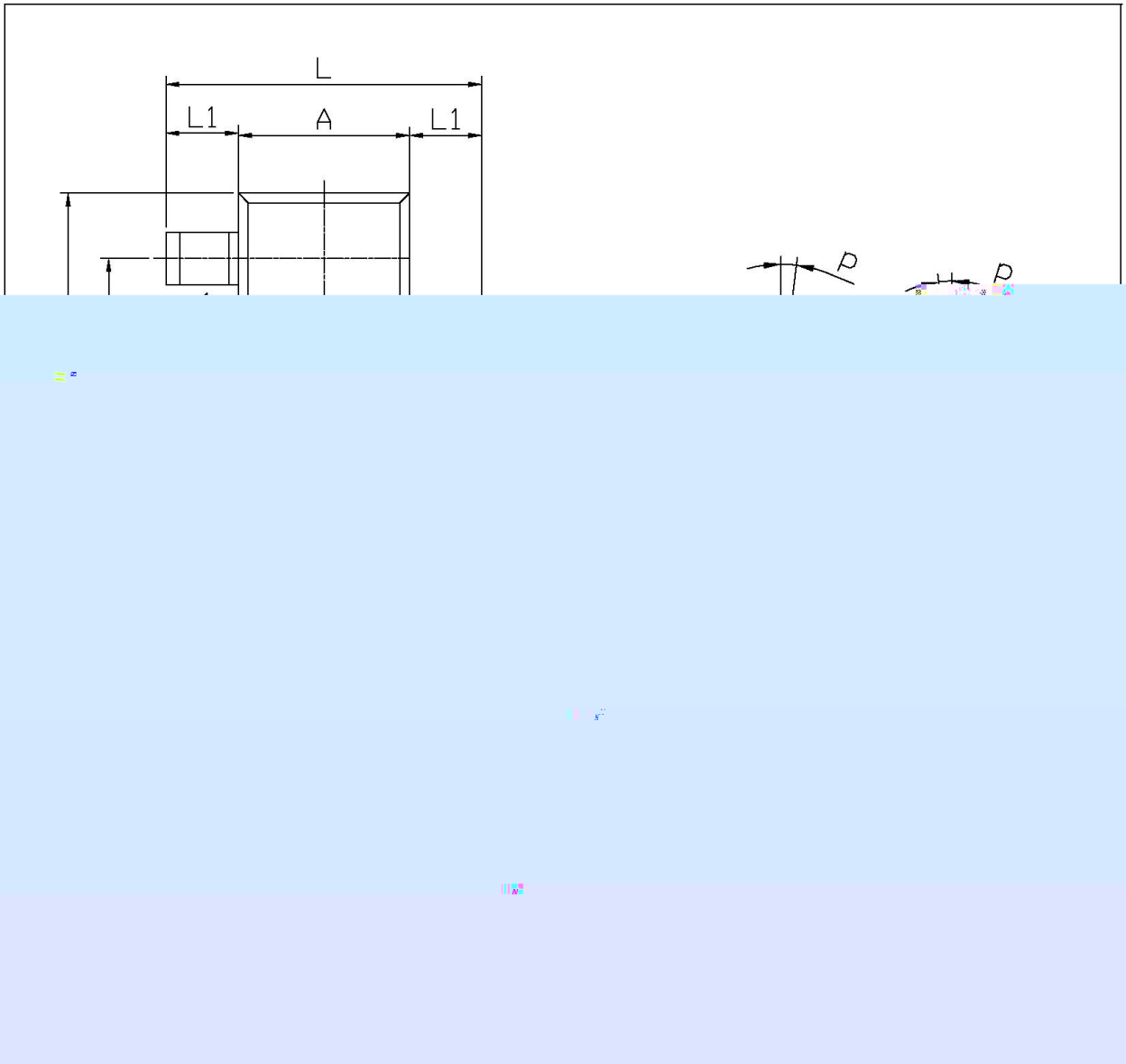




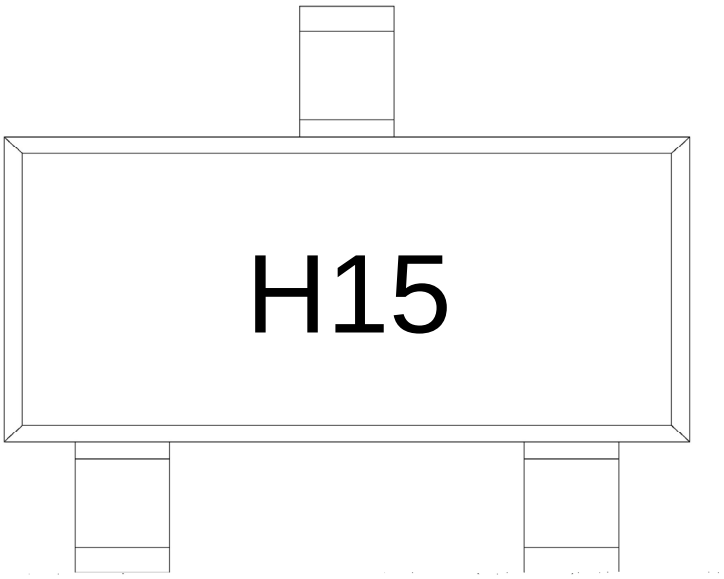


/ Package Dimensions

SOT-23 单位：mm



/ Marking Instructions



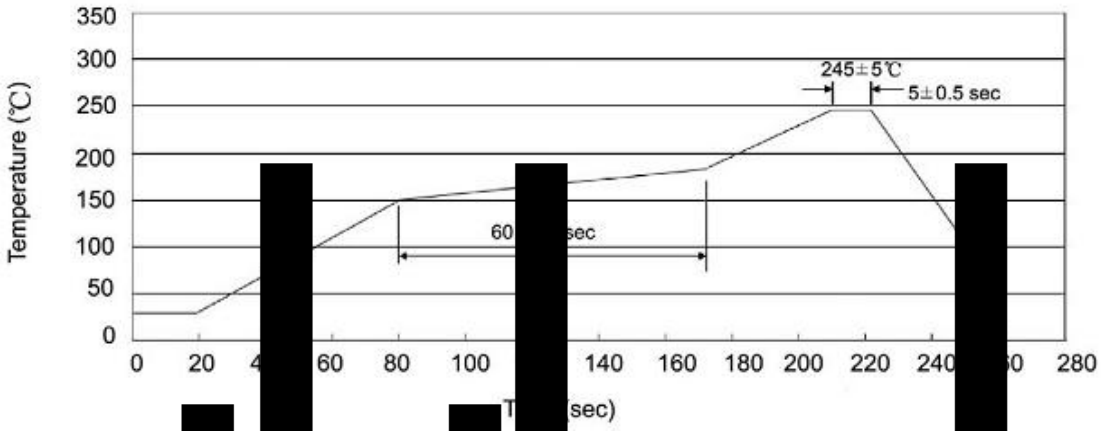
15

Note:

Company Code

15 Product Type Code

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



Note:

1	150 180	60		1.Preheating:150~180 me:60~90sec
2	245	5		2.Peak Temp.:245 5 ration:5 0.5s
3		2 10 /sec.		3. Cooling Speed: 2~10 /sec.

Resistance to dering Heat Test Conditions

260 5	10 1 se	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)		
	只卷盘	卷盘盒	只盒	盒箱	只箱		盒	箱

/ Notices