

/ Descriptions

VRW056

SQS

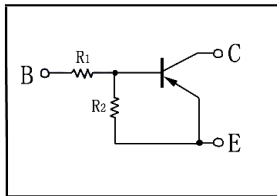
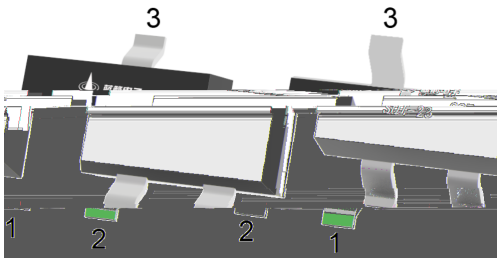
Silicon PNP Digital transistor in a SOT-23 Plastic Package.

/ Features

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

/ 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	H13
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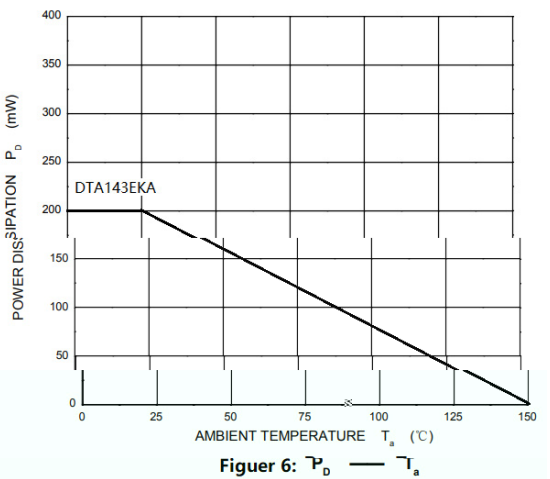
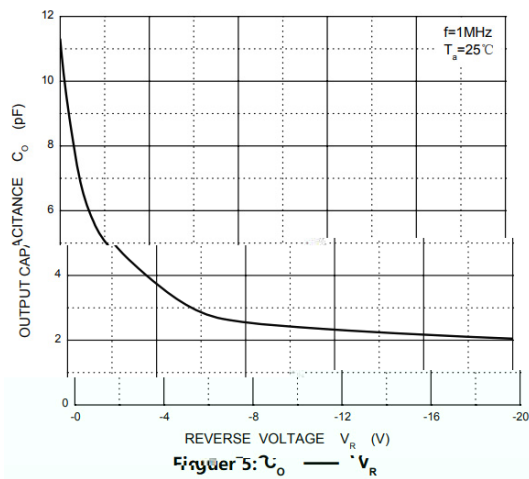
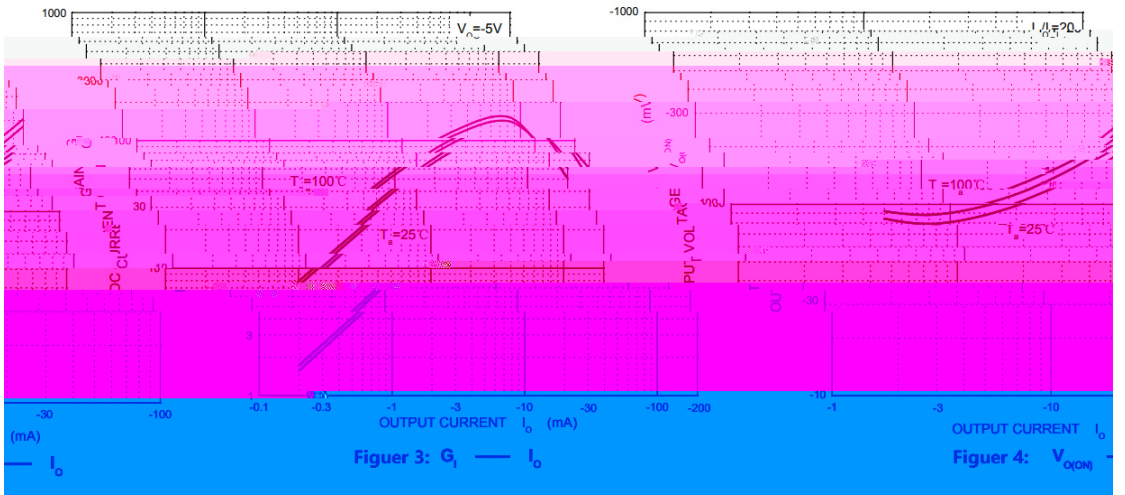
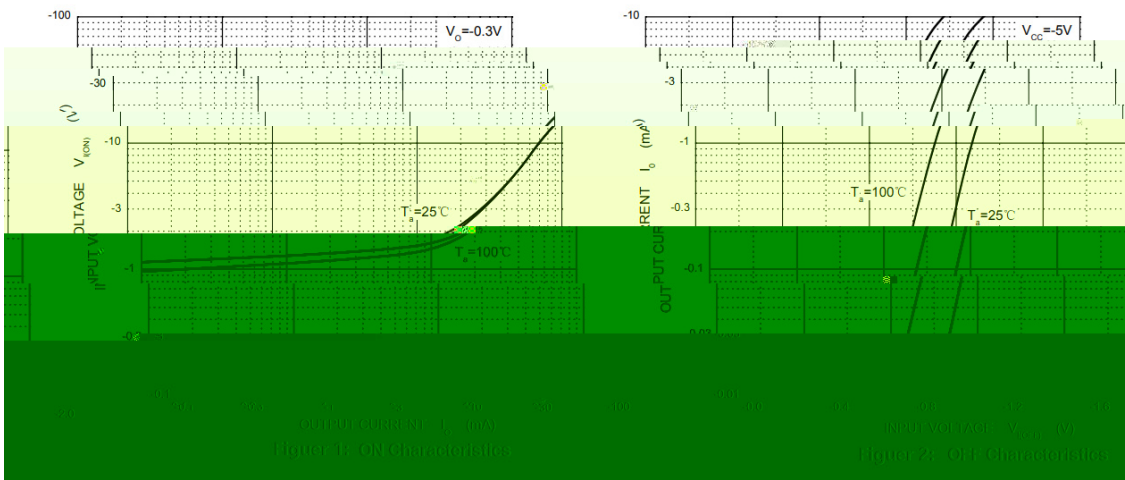
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

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

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage	$V_{I(off)}$	$V_{CC}=-5.0V$ $I_O=-100\mu A$	-0.5		-	V
	$V_{I(on)}$	$V_O=-0.3V$ $I_O=-20mA$			-3	V
Output Voltage	$V_{O(on)}$	$I_O=-10mA$ $I_I=-0.5mA$		-0.1	-0.3	V
Input Current	I_I	$V_I=-5.0V$			-1.8	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=-50V$ $V_I=0V$			-0.5	μA
DC Current Gain	G_I	$V_O=-5.0V$ $I_O=-10mA$	30			
Transition Frequency	f_T	$V_{CE}=-10V$ $I_E=5.0mA$ $f=100MHz$		250		MHz
Resistance1	R_1		3.29	4.7	6.11	K Ω
Resistance Ratio	R_2/R_1		0.8	1.0	1.2	

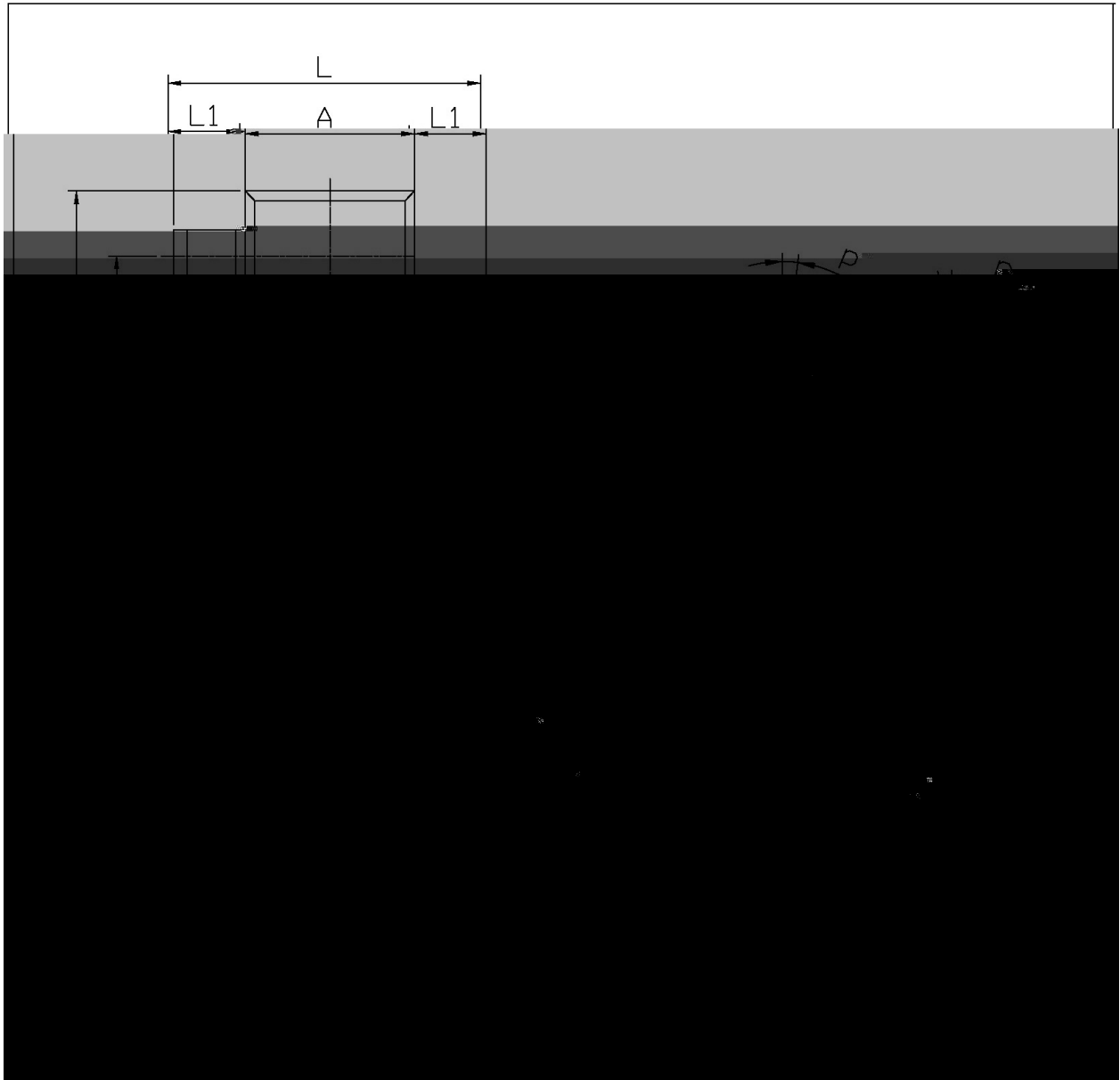
/ Electrical Characteristic Curve



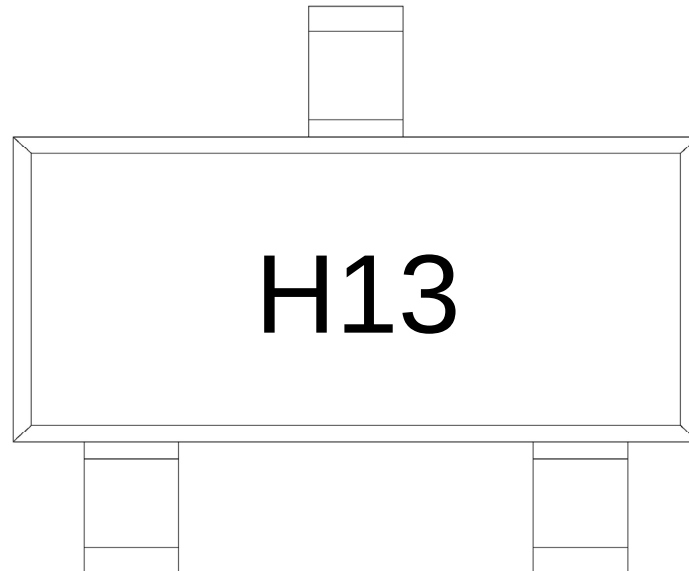
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



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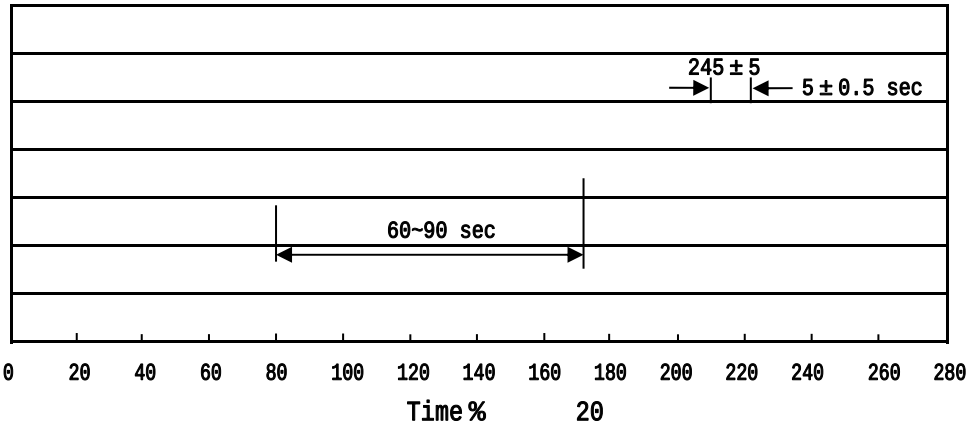
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Note:

K Company Code

13 Product Type Code

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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