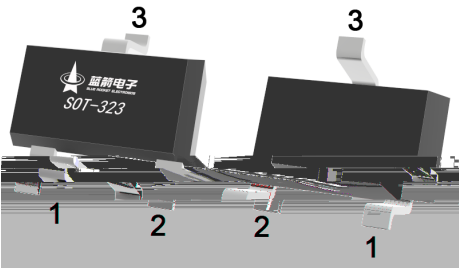


VRW0656 QSQ
Silicon NPN Digital transistor in a SOT-323 Plastic Package.

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

Vzlwfkqlj dssolfdwlrqv/ lqwhuidfh flufxlw dqg gulyhu flufxlw dssolfdwlrqv!



PIN 1 IN PIN 2 GND PIN 3 OUT

/ **h_{FE} Classifications & Marking**

Marking	H23
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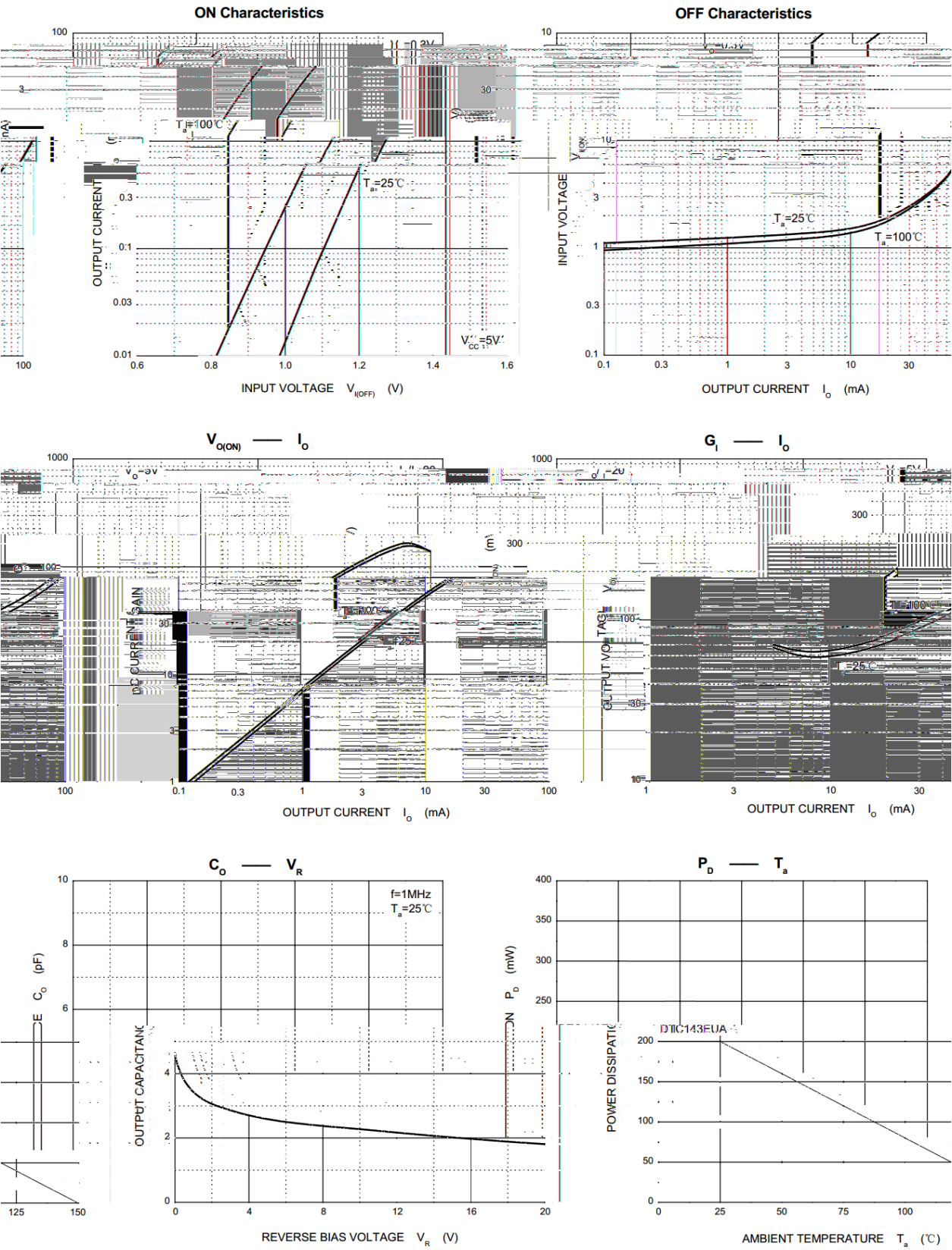
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Supply Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	-10~30	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(OFF)	$V_{I(off)}$	$V_{CC}=5.0V$ $I_O=0.1mA$	0.5			V
Input Voltage(ON)	$V_{I(on)}$	$V_O=0.3V$ $I_O=20mA$			3.0	V
Output Voltage	$V_{O(on)}$	$I_O=10mA$ $I_I=0.5mA$		0.1	0.3	V
Input Current	I_I	$V_I=5.0V$			1.8	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=50V$ $V_I=0$			0.5	A
DC Current Gain	G_I	$V_O=5.0V$ $I_O=10mA$	20			
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
Resistance Ratio	R_2/R_1		0.8	1.0	1.2	

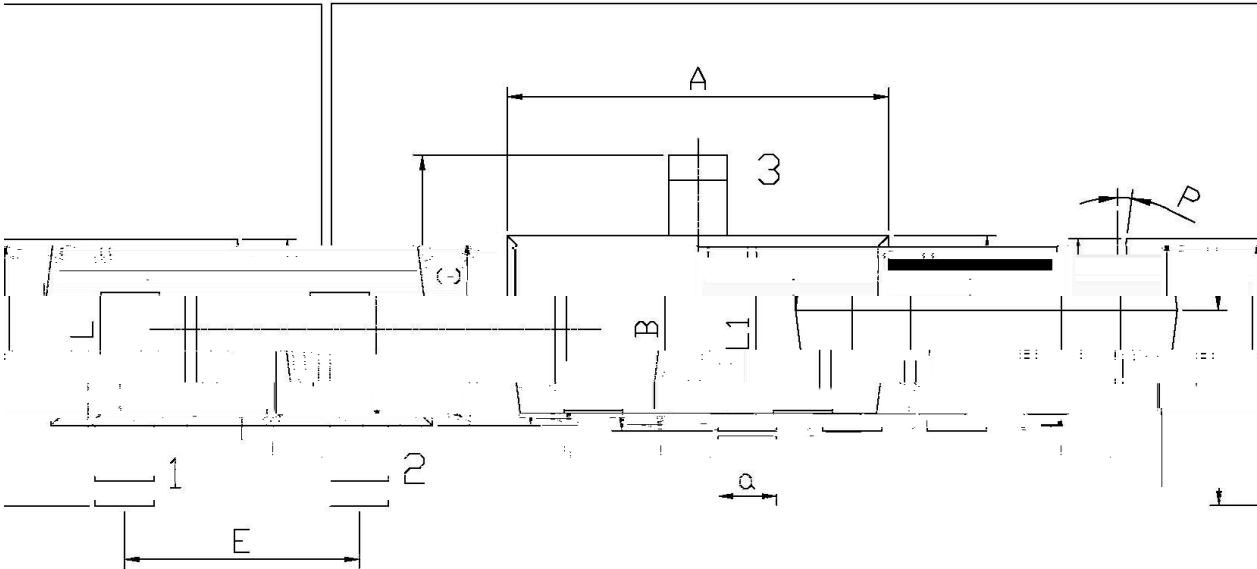
/ Electrical Characteristic Curve



/ Package Dimensions

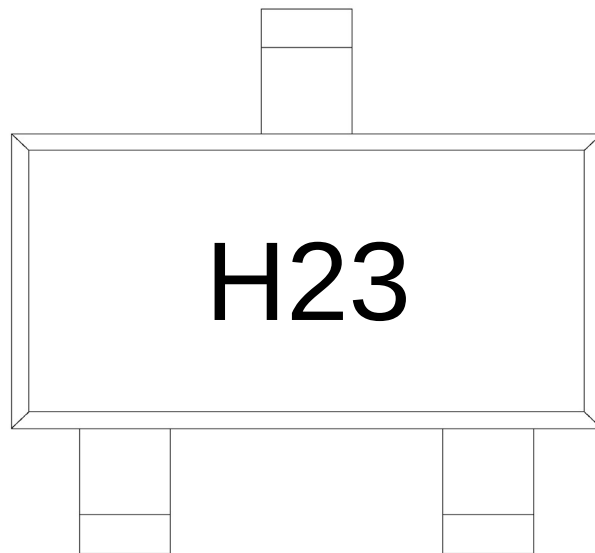
SOT-323

单位: mm



Symbol		Dimensions In Millimeters		Symbol		Dimensions In Millimeters	
Min	Max	Min	Max	Min	Max	Min	Max
0.95	2.35	C	0.30	0.50			
2.00	2.2	L	0.85	1.15			
1.20	1.40	a	0.20	0.40			
3	1.15	1.35	P	7°			

/ Marking Instructions



K

23

Note:

K Company Code

23 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)		
SOT-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices