





**/ Descriptions**

SOT-323                      PNP                      Silicon PNP Digital Transistor in a SOT-323 Plastic Package.

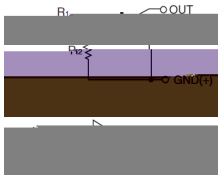
**/ Features**

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

**/ Applications**

Switching applications, interface circuit and driver circuit applications.

**/ Equivalent Circuit**



**/ Pinning**



**/ Marking**

Marking	H14
---------	-----

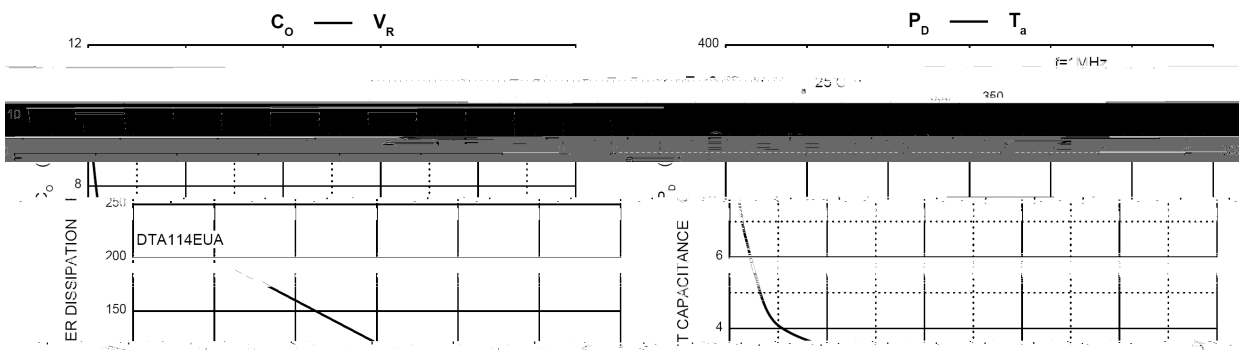
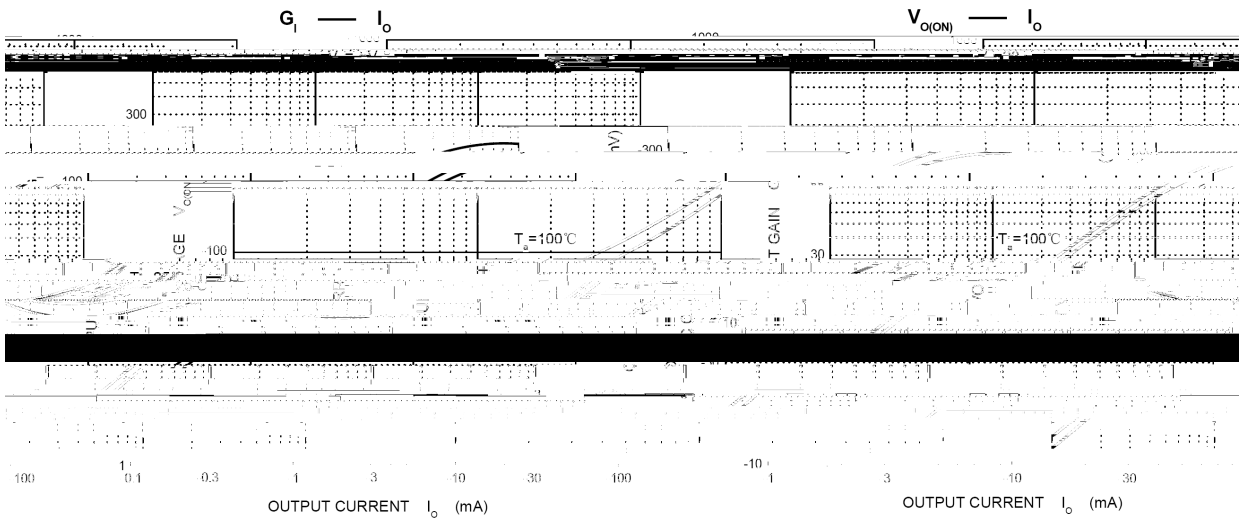
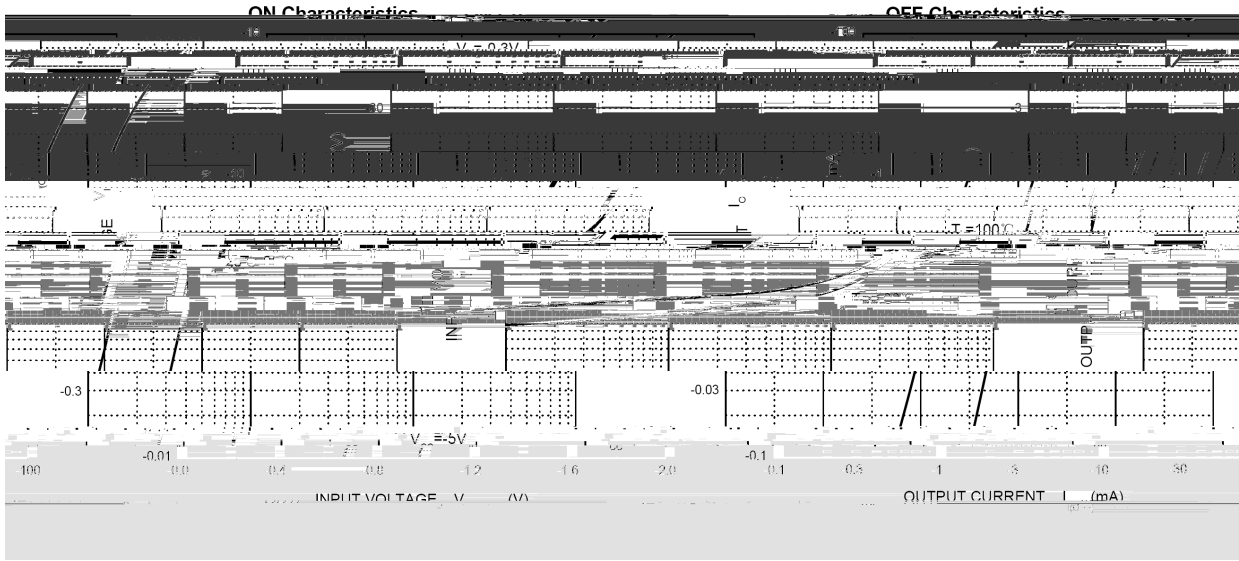
## / Absolute Maximum Ratings(Ta=25 )

Parameter	Symbol	Rating	Unit
Output Voltage	$V_{CC}$	-50	V
Input Voltage	$V_{IN}$	10	V
		-40	V
Output Current	$I_O$	-50	mA
Peak Collector Current	$I_{CM}$	-100	mA
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_j$	-55~150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

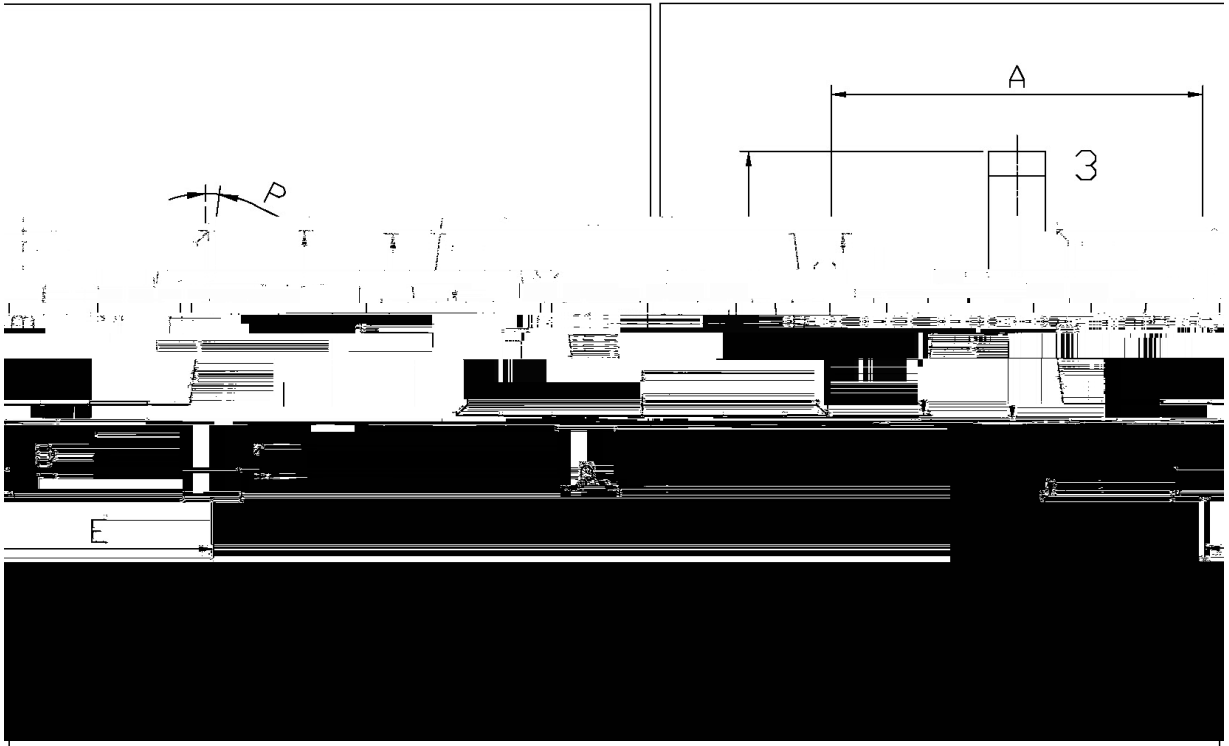
## / Electrical Characteristics(Ta=25 )

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
	$V_{I(on)}$	$V_O=-0.3V$ $I_O=-10mA$			-3.0	V
Output Voltage	$V_{O(on)}$	$I_O=-10 mA$ $I_I=-0.5mA$			-0.3	V
Input Current	$I_I$	$V_I=-5.0V$			-0.88	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=-50V$ $V_I=0V$			-0.5	$\mu A$
DC Current Gain	$G_1$	$V_O=-5.0V$ $I_O=-5.0mA$	30			
Resistance1	$R_1$		7	10	13	K
Resistance Ratio	$R_2/R_1$		0.8	1.0	1.2	
Transition Frequency	$f_T$	$V_O=-10V$ $I_O=-5.0mA$ $f=100MHz$		250		MHz

/ Electrical Characteristic Curve

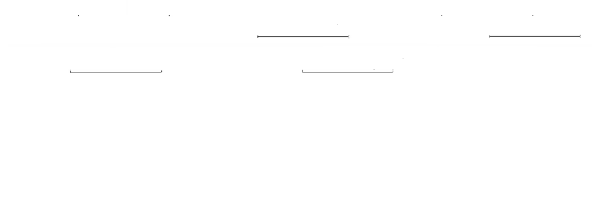
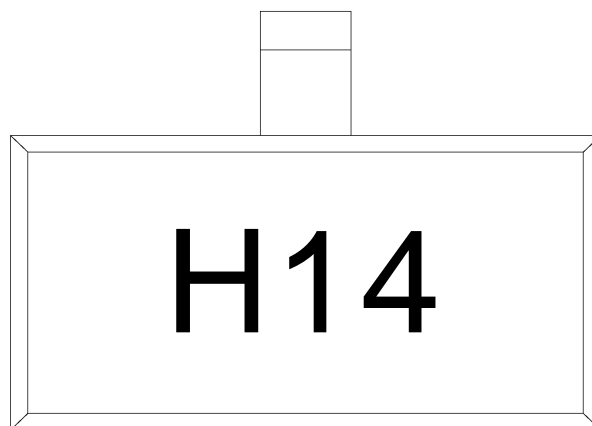


**/ Package Dimensions**



Dimensions In Millimeters		Dimensions In Millimeters	
235	0.30	A	195
0.63	0.15	3	200
0.20	0.40	E	0.7
7°		P	1.5
			1.35

**/ Marking Instructions**



H

14

Note:

H      Company Code

14     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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-323	3,000	10	30,000			7" x8	180x120x180	390x385x205