

DTC144EKA

Rev.H Apr.-2025

/ Descriptions

SOT-23

NPN

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

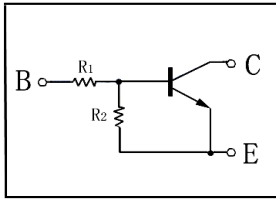
/ Features

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

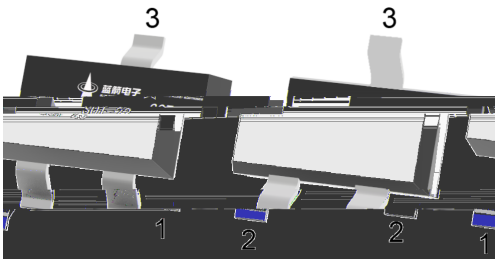
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN 1 Base

PIN 2 Emitter

PIN 3 Collector

/ hFE Classifications & Marking

Marking	H26
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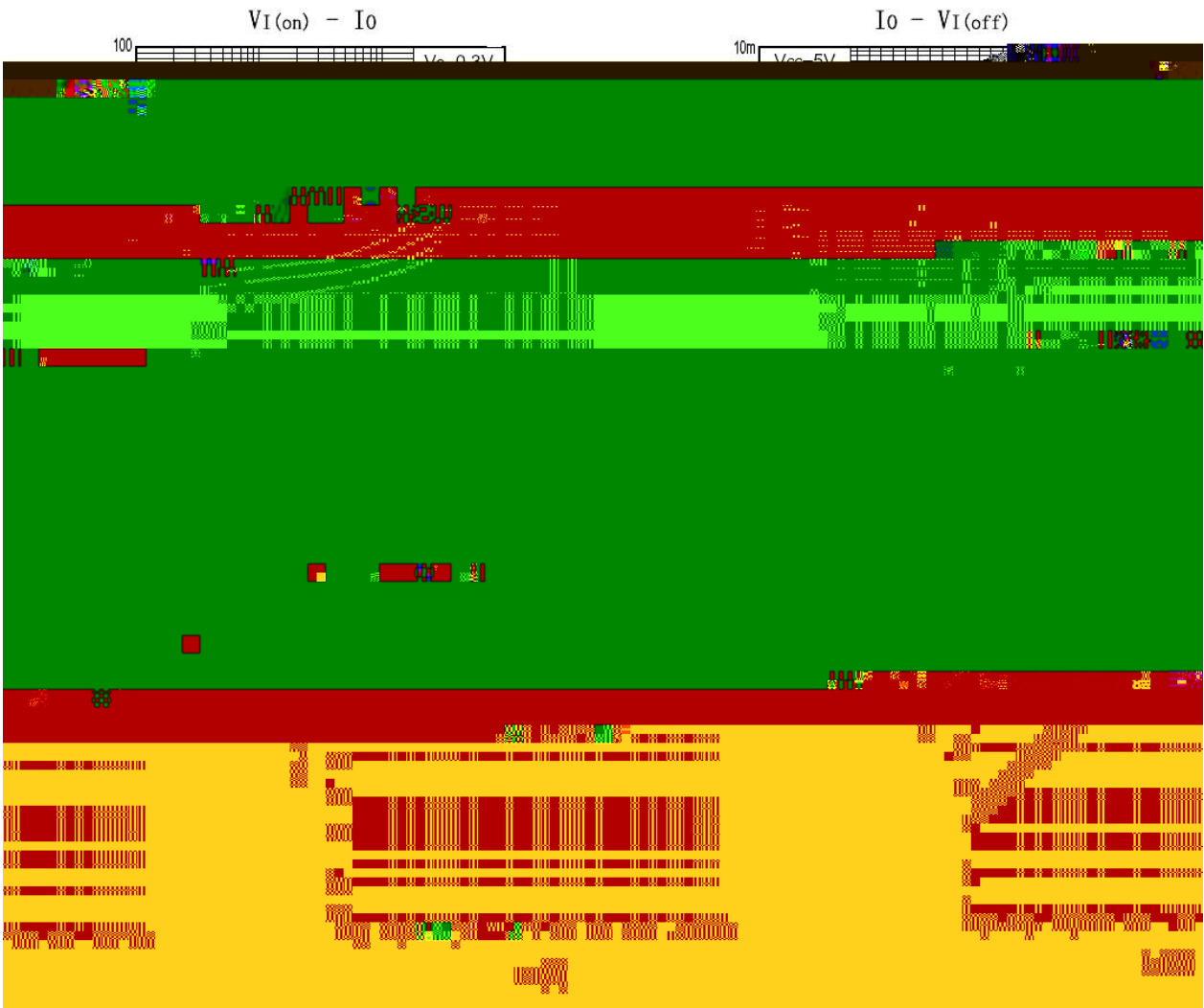
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Output Voltage	V _{CC}	50	V
Input Voltage	V _{IN}	40	V
		-10	V
Output Current	I _O	30	mA
Peak Collector Current	I _{CM}	100	mA
Power Dissipation	P _C	200	mW
Junction Temperature	T _J	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 =100μA	0.5			V
	V _{I(on)}	V _O =0.3V I _O =2mA			3	V
Output Voltage	V _{O(on)}	I _O =10mA I _I =0.5mA			0.3	V
Input Current	I _I	V _I =5.0V			0.18	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	68			
Transition Frequency	f _T	V _{CE} =10V I _E =-5.0mA f=100MHz		250		MHz
Resistance1	R ₁		32.9	47	61.1	KΩ
Resistance Ratio	R ₂ /R ₁		0.8	1	1.2	

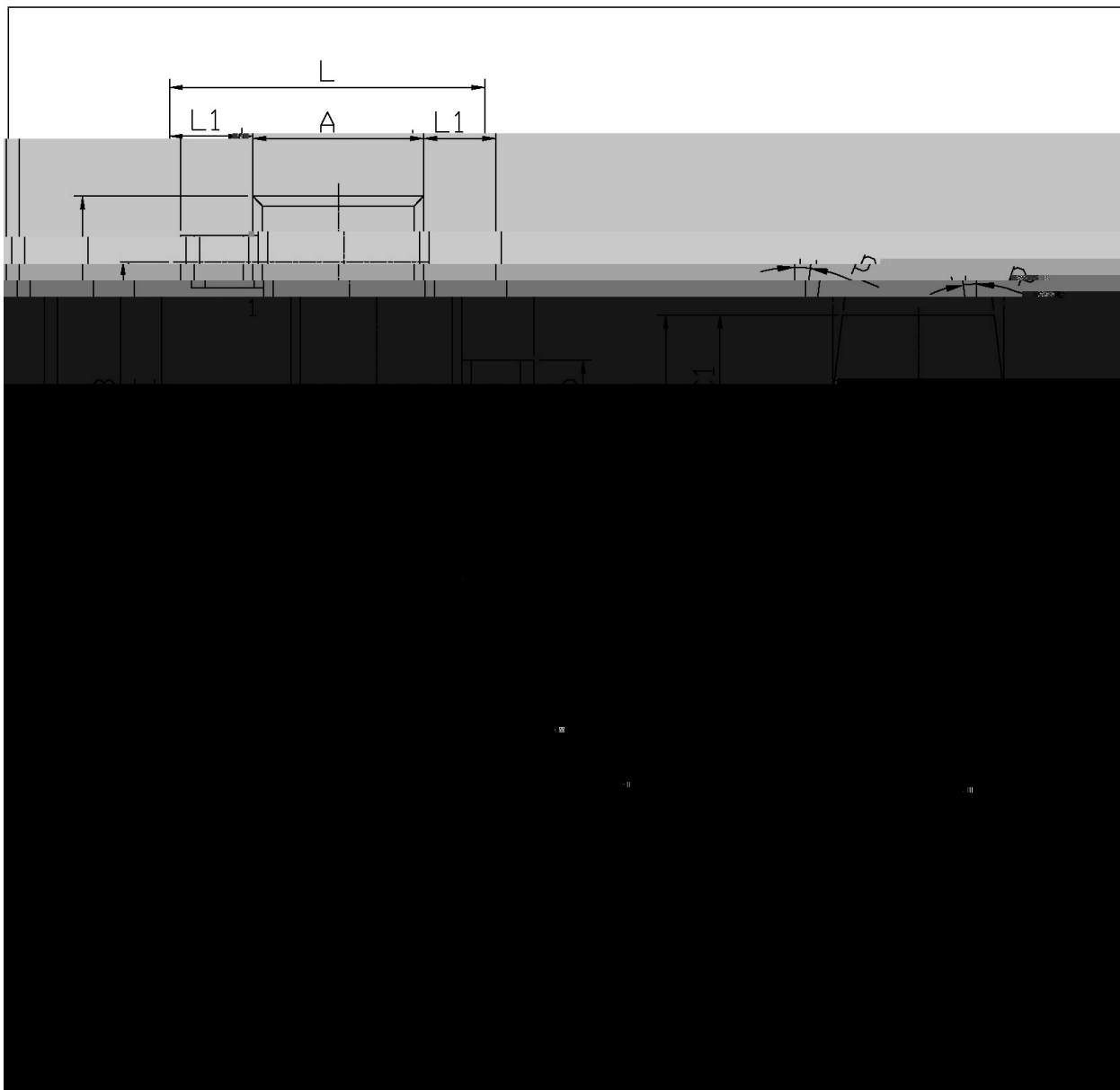
/ Electrical Characteristic Curve



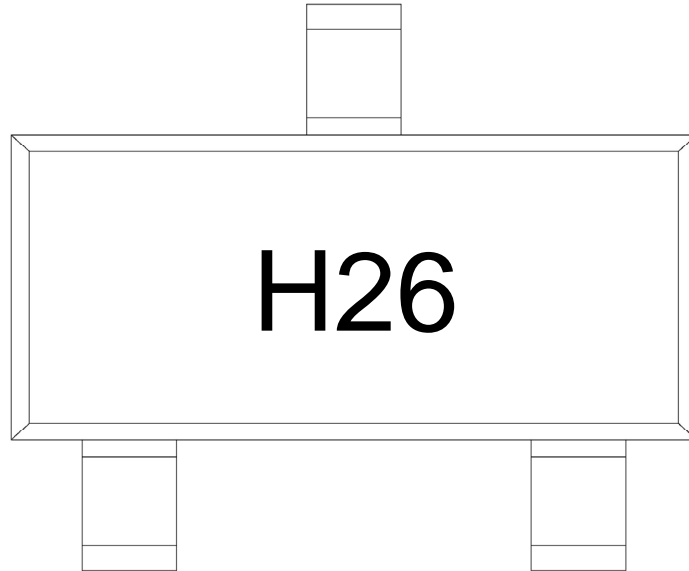
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



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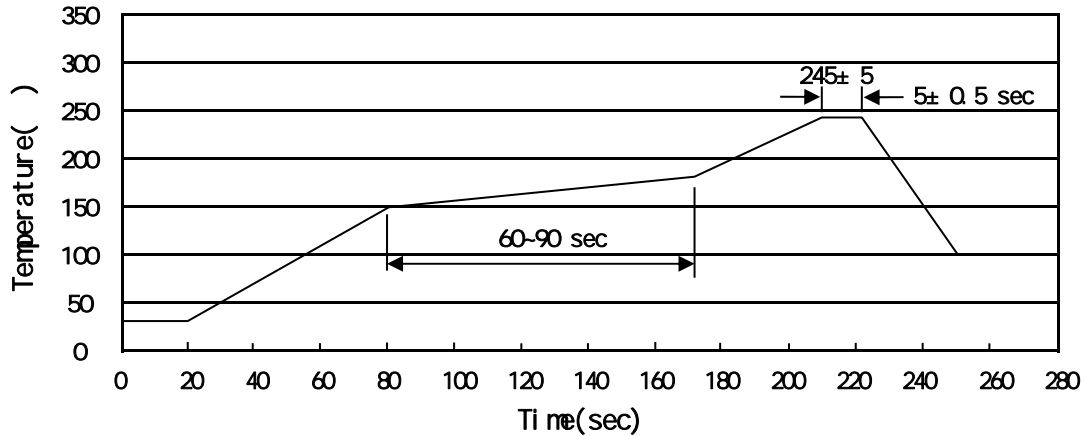
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Note:

H Company Code

26 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°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)		
	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-23	3,000	10	30,000	6	180,000	7 x8	180x120x180	390x385x205

/ Notices