

DTC124EKA
Rev.F May.-2019

SOT-23

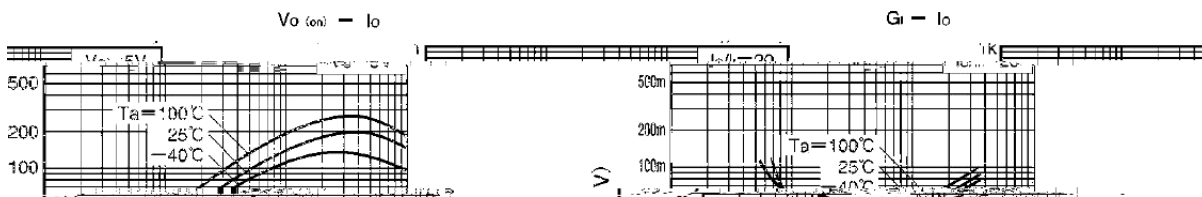
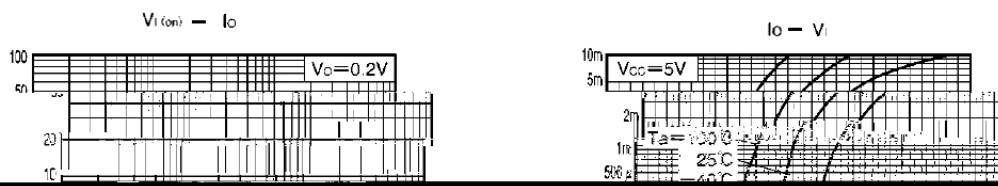
NPN

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

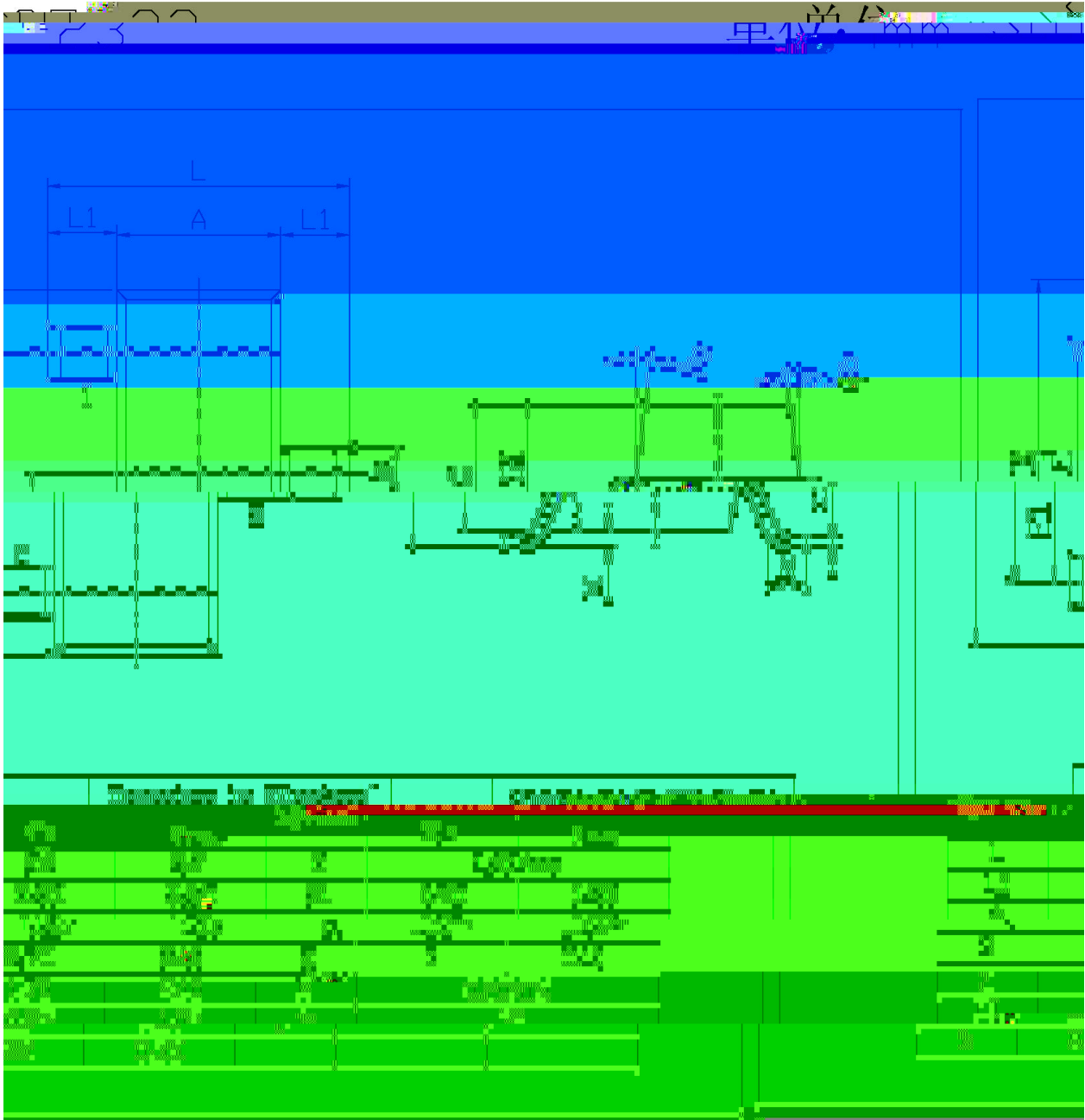
Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	40	V
		-10	V
Output Current	I_C	100	mA
	I_O	30	mA
Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

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	A
DC Current Gain	G_I	$V_O=5.0V$ $I_O=5.0mA$	56			
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=5.0mA$ $f=100MHz$		250		MHz
Resistance1	R_1		15.4	22	28.6	K
Resistance Ratio	R_2					

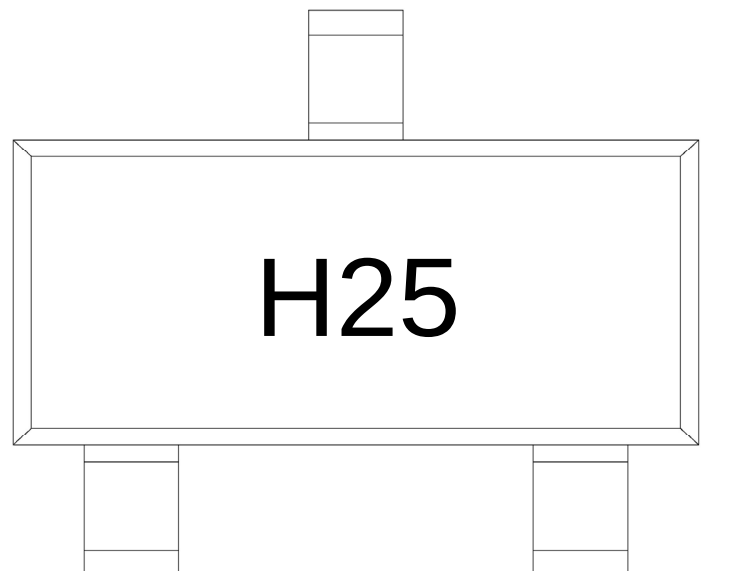
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

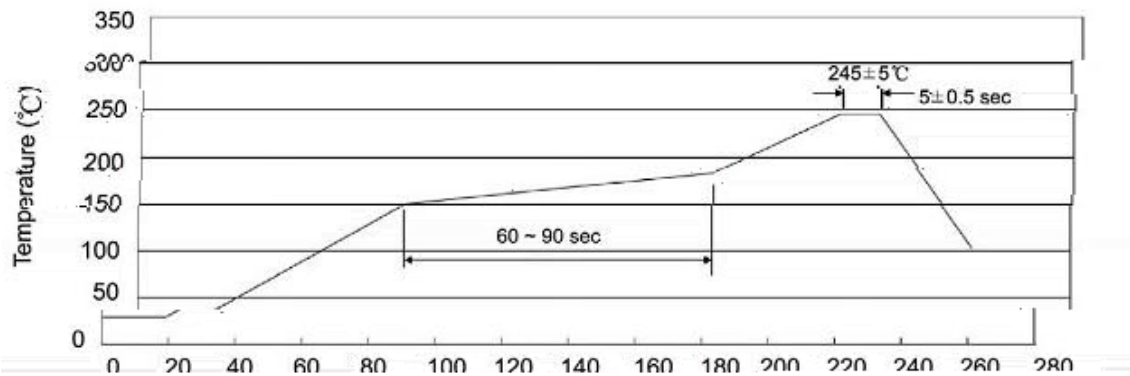
25

Note:

H Company Code

25 Product Type Code

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



Note:

- 1

150 180

60 90sec;
- 2

245±5

5±0.5sec;
- 3

2 10

/sec.
- 1.Preheating:150~180

, Time:60~90sec.
- 2.Peak Temp.:245±5

, Duration:5±0.5sec.
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 包					Dimension 包 尺寸 (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