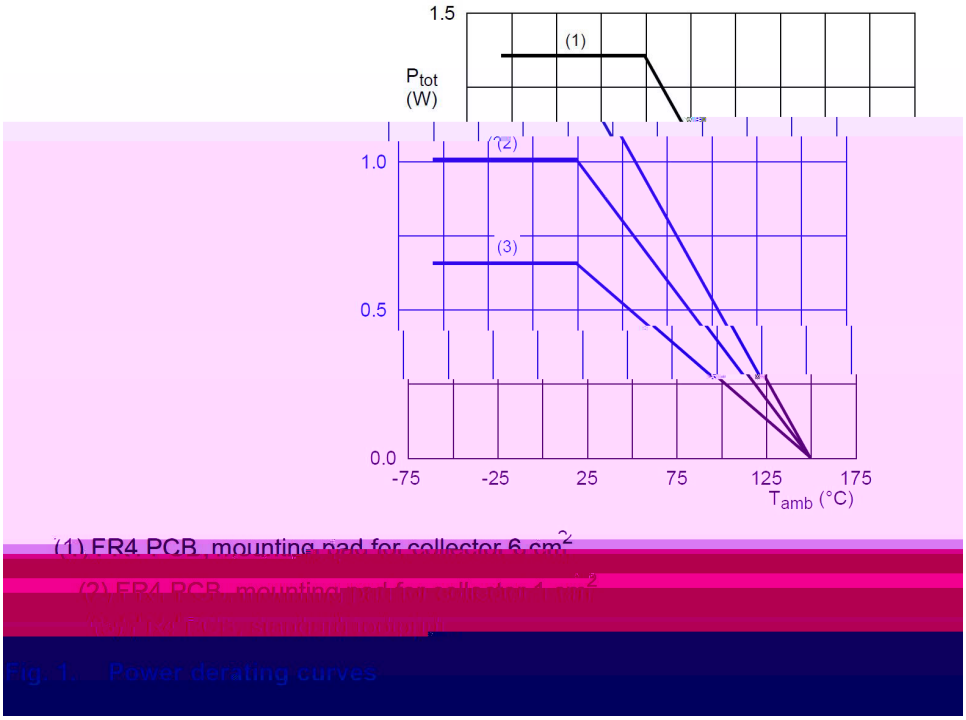
SOT-223

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-180	V
Collector to Emitter Voltage	V_{CEO}	-140	V
Emitter to Base Voltage	V_{EBO}	-7.0	V
Collector Current - Continuous	I		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=-150 V I_E=0A T_{amb} = 25 °C			-100	nA
		V_{CB}=-150 V I_E=0A T_j = 150 °C			-50	uA
Collector-emitter cut-off current	I_{CES}	V_{CE} = -115 V V_{BE} = 0V T_{amb} = 25 °C			-100	nA
Emitter-base cut-off current	I_{EBO}	V_{EB} = -6 V I_C = 0 A T_{amb} = 25 °C			-100	nA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-5.0V I_C = -10mA T_{amb} = 25 °C	100	160		
	$h_{FE(2)}$	V_{CE} = -5 V I_C = -1A tp 300 s 0.02 T_{amb} = 25 C	100	150	300	
	$h_{FE(3)}$	V_{CE} = -5 V I_C = -3A tp 300 s 0.02 T_{amb} = 25 C	75	100		
	$h_{FE(4)}$	V_{CE} = -5 V I_C = -4A tp 300 s 0.02 T_{amb} = 25 C	35	50		

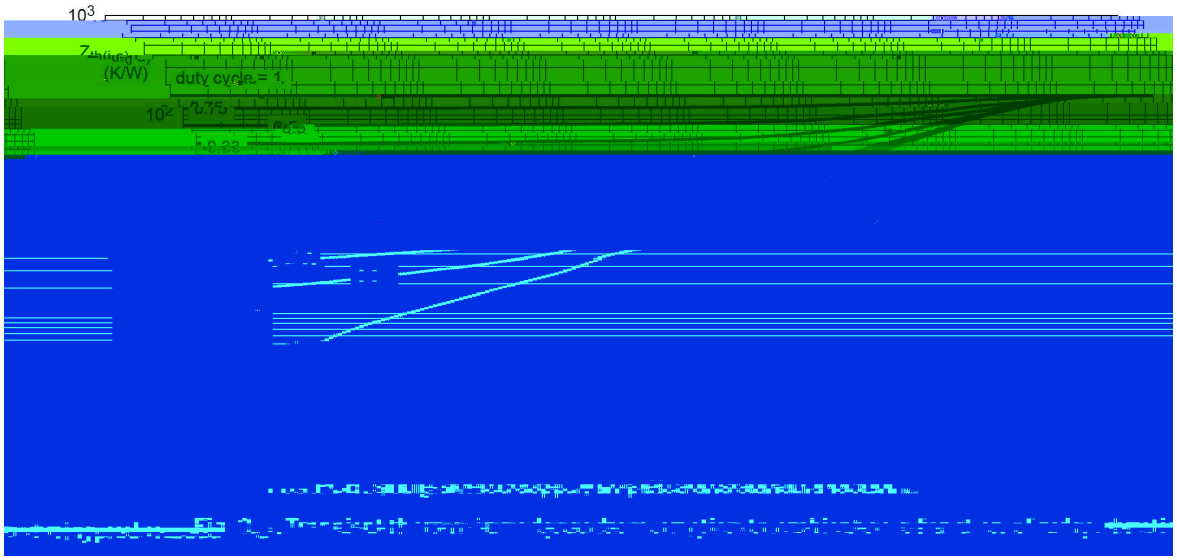
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$

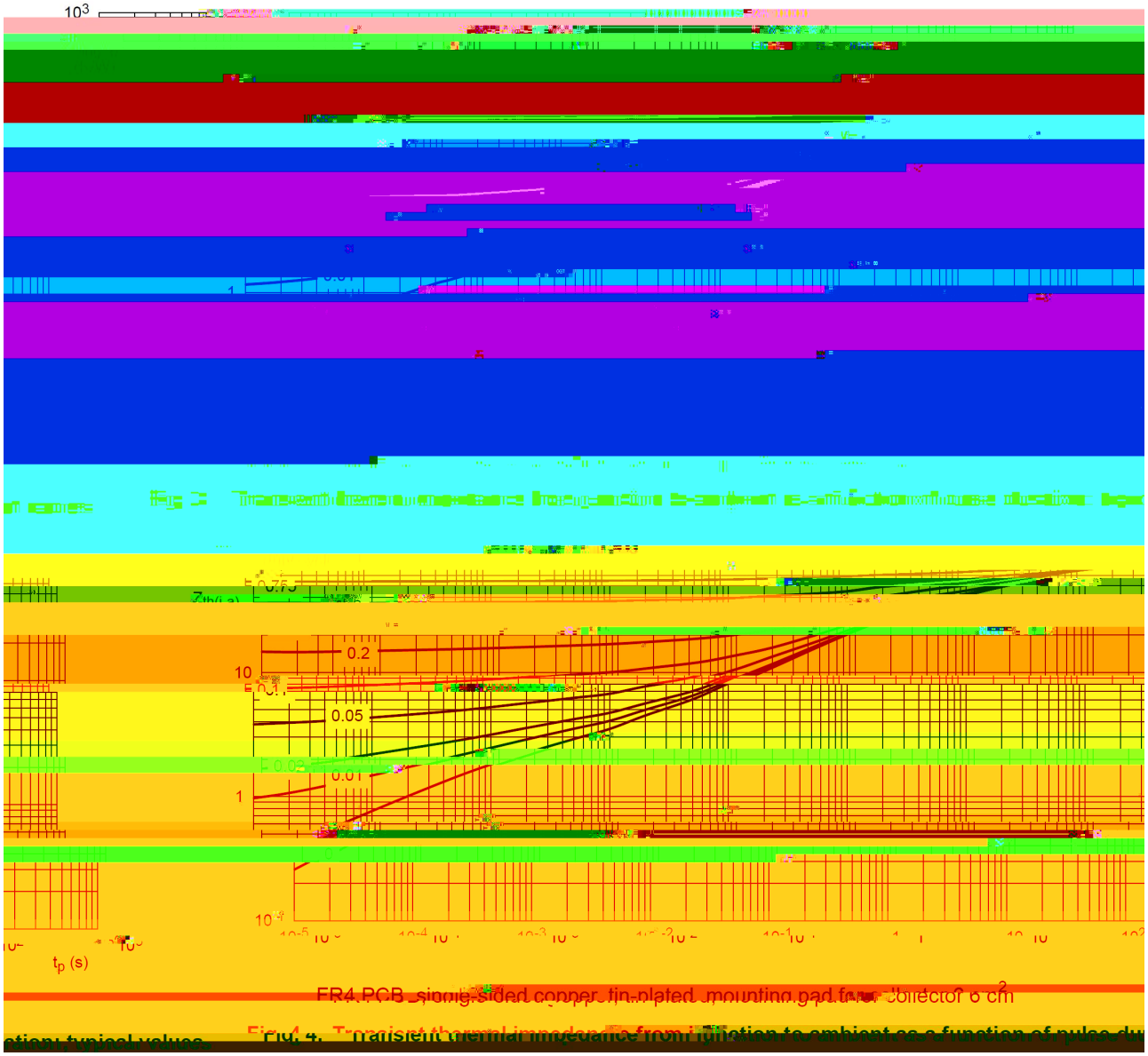


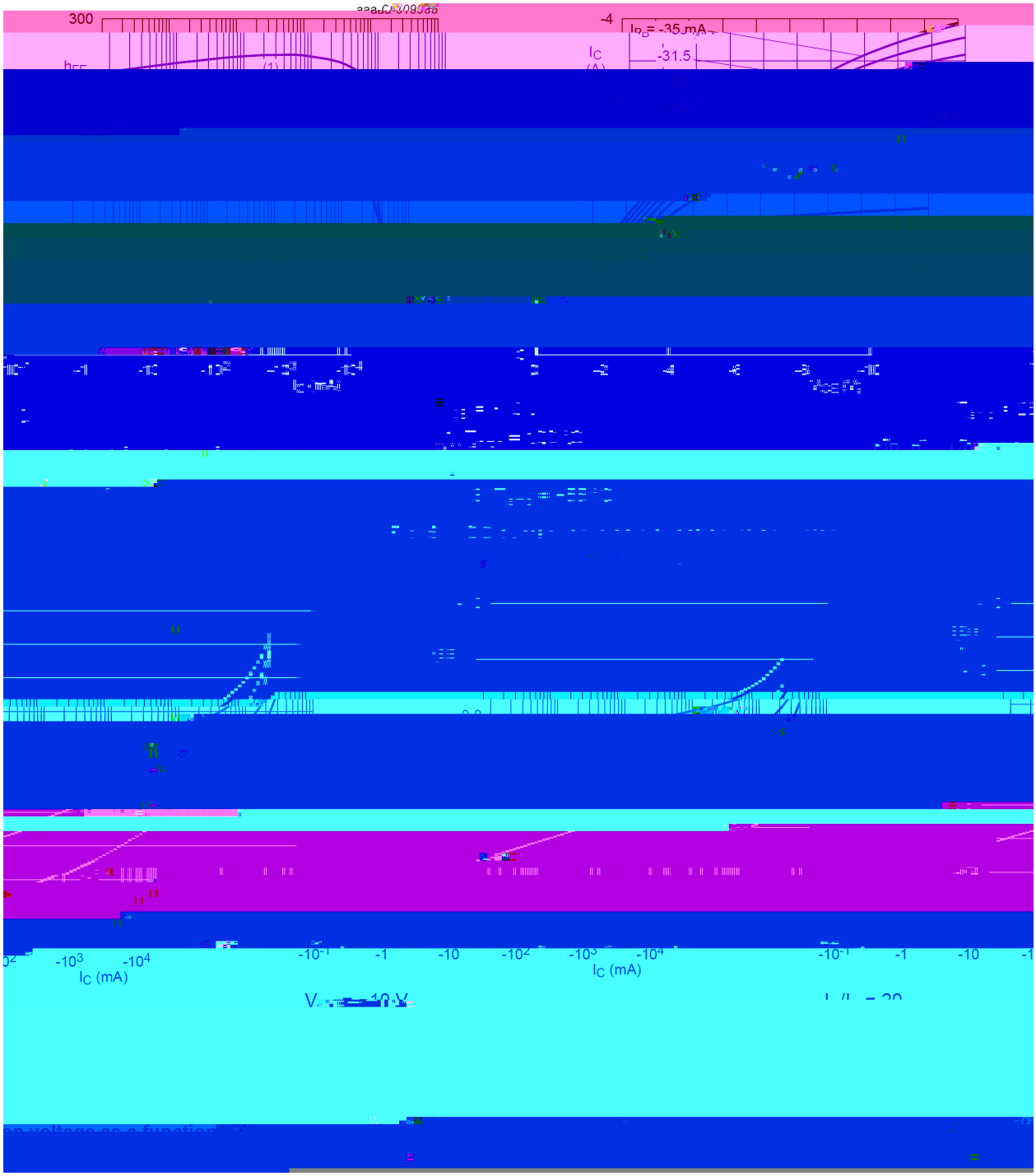
(1) FR4 PCB, mounting pad for collector 6 cm^2

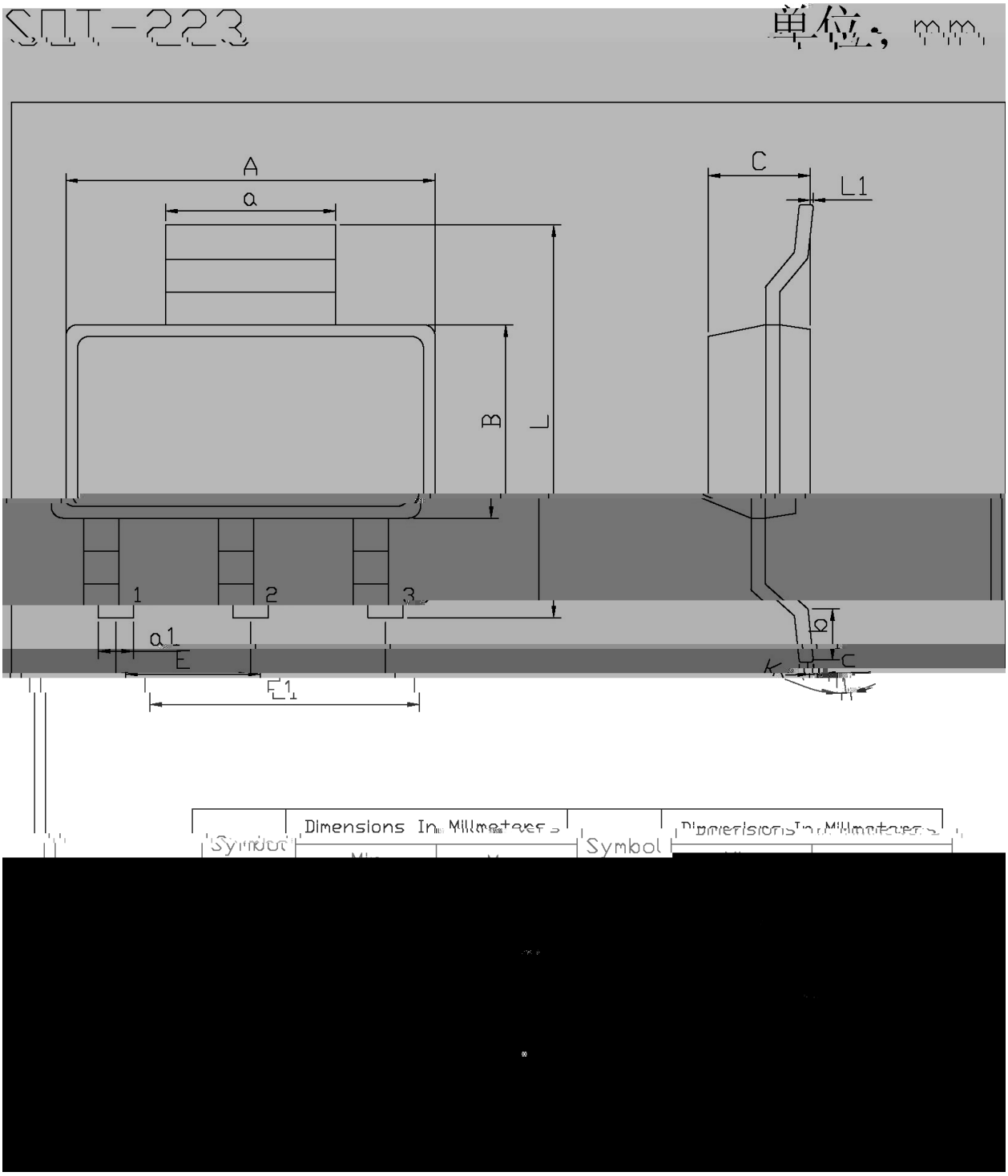
(2) FR4 PCB, mounting pad for collector 1 cm^2

Fig. 1 Power derating curves




10^3
10
1
0.2
0.05
0.01
t_p (s)


300
-4
-31.5
I_C (mA)
V_{CE} (V)
I_C (mA)
I_C (mA)


SOT-223
单位：mm
A
a
B
L
C
L1
1
2
3
a1
E
e1
Dimensions In Millimeters
Symbol
Dimensions In Millimeters
Symbol



BR

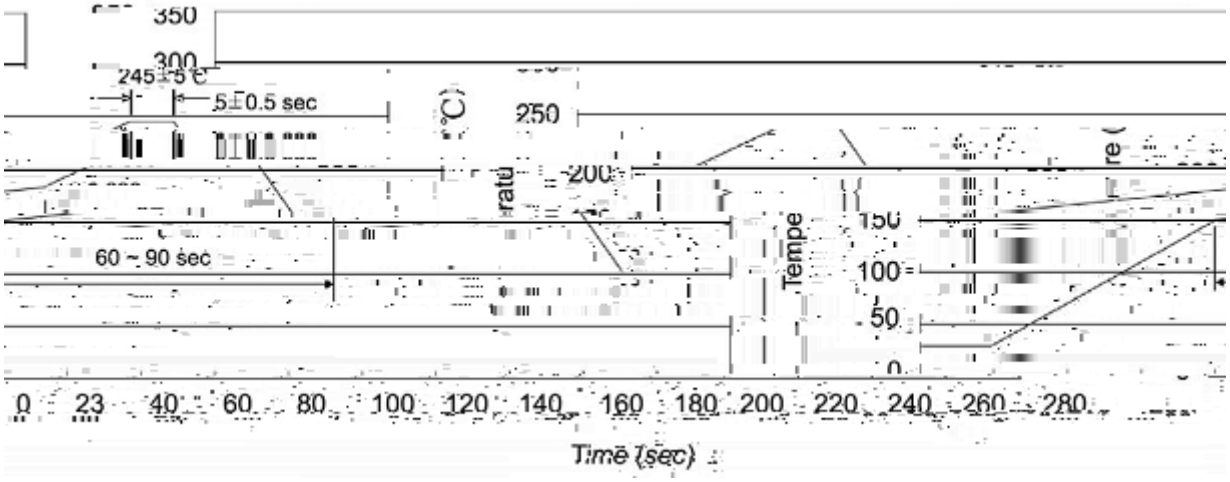
Note:

BR: Company Code.

9414: Product Type.

****: Lot No. Code, code change with Lot No.

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1 25 150 60 90sec;

1.Preheating:25~150 , 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.

260 5 10 1 sec. Temp:260±5 Time:10±1 sec

/ REEL

Package Type	Units					Dimension		(unit mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-223	2,500	2	5000	5	25,000	13 ×12	340×340×50	385×257×392