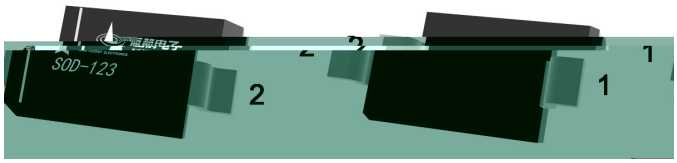
SOD-123

Schottky Diode in a SOD-123 Plastic Package.

High Breakdown Voltage,Low Forward Voltage,HF Product.

General purpose.



PIN1:Cathode PIN2:Anode

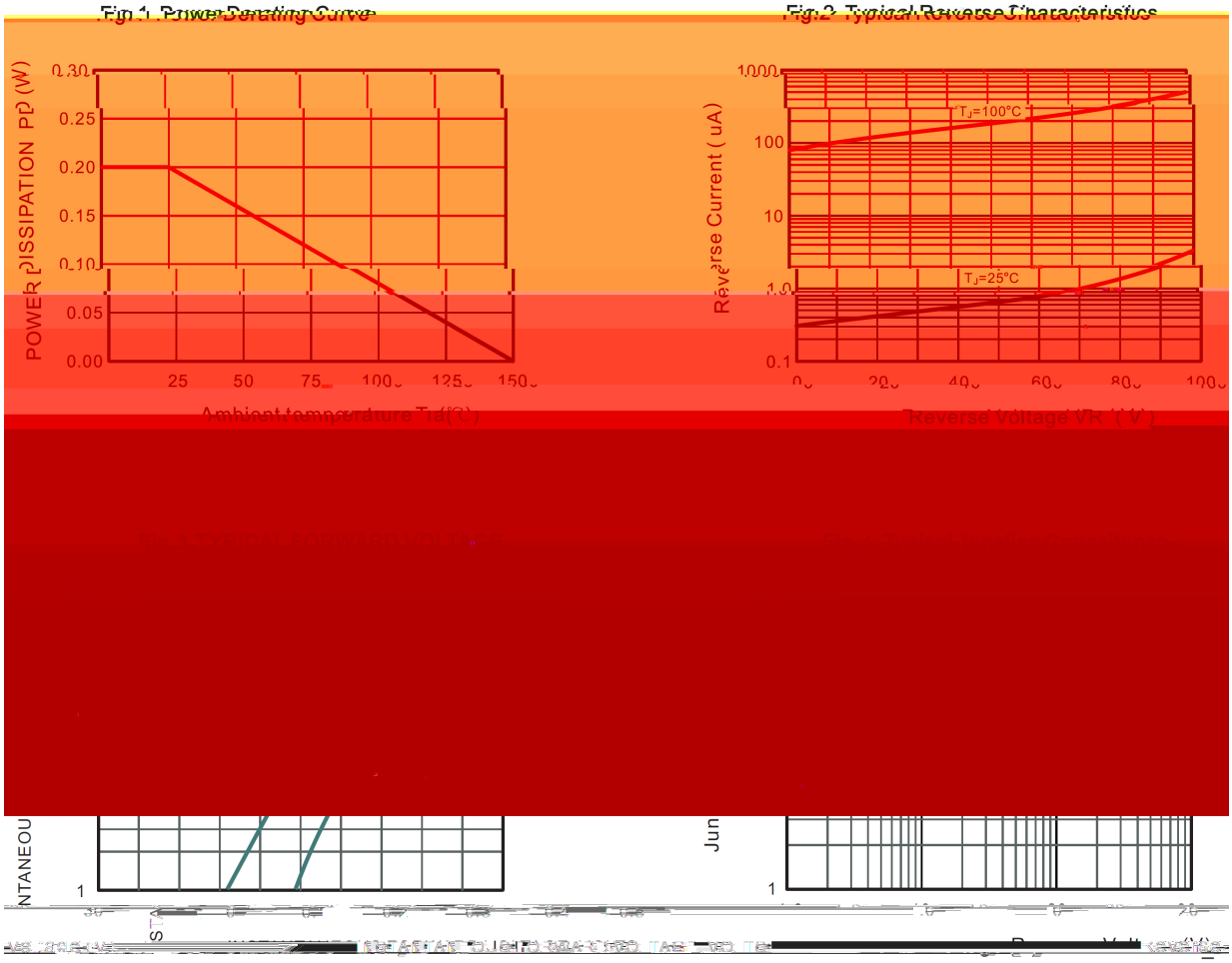
Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working peak reverse voltage	V_{RWM}	100	V
Continuous Forward Current	I_F	150	mA
Repetitive peak forward current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	I_{FRM}	350	mA
Non-reptitive Peak Forward Surge Current at 8.3ms	I_{FSM}	750	mA
Power Dissipation	P_D	200	mW
Thermal resistance junction to ambient air	R_{thJA}	500	/W
Operating and Storage Temperature Range	T_J,T_{stg}	-55 ~ +150	

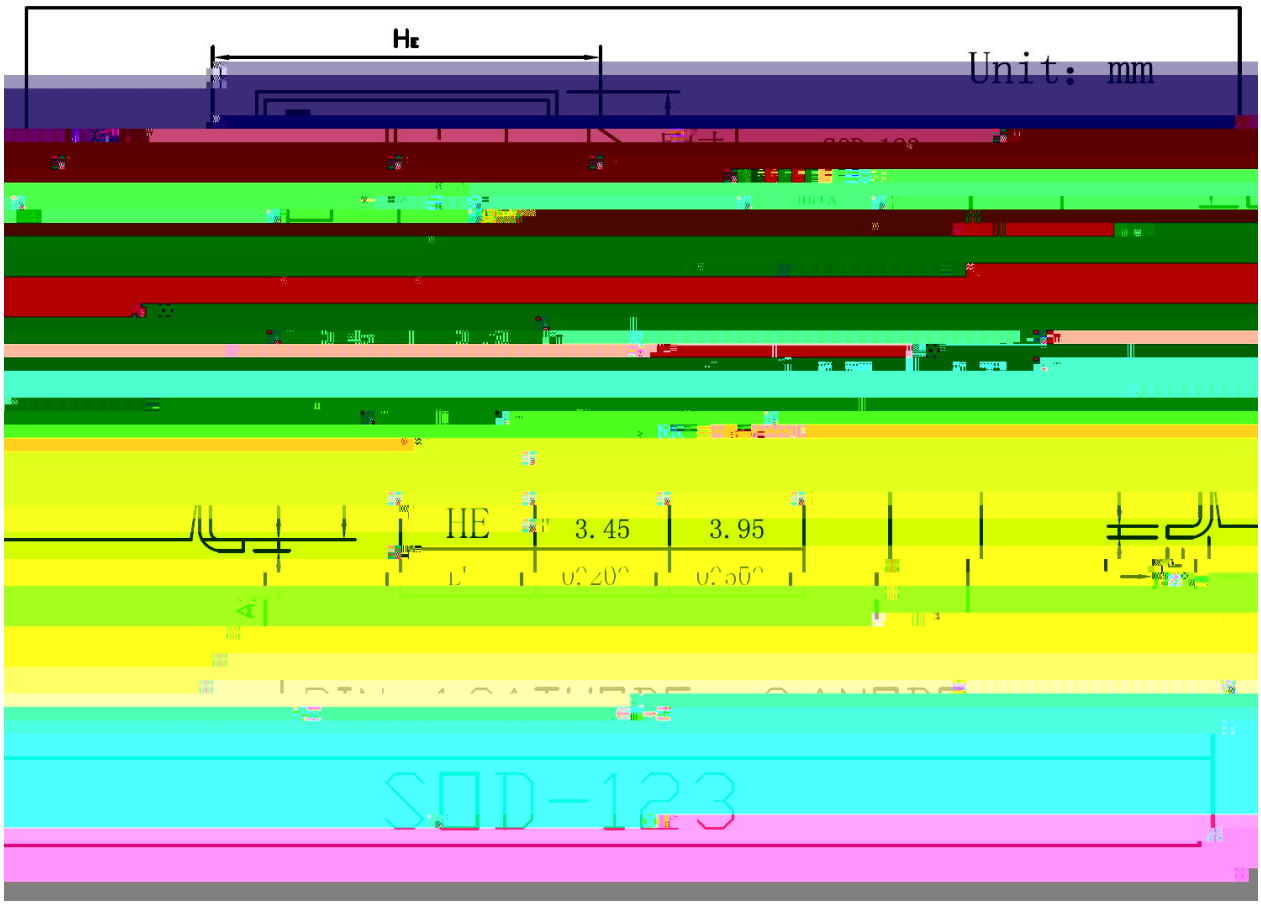
Parameter	Symbol	Test Conditions	Rating	Unit
Reverse BreakdownVoltage at IR=100μA(NOTE 2)	$V_{(BR)R}$	I_R=100μA	100	V
Maximum Forward Voltage (NOTE 2)	V_F	I_F=0.1mA	0.3	V
		I_F=10mA	0.45	
		I_F=250mA	1.0	
Peak Reverse Current	I_R	V_R=1.5V	0.3	μA
		V_R=10V	0.5	
		V_R=50V	1	
		V_R=75V	2	
Diodes Capacitance	C_T	V_R=0,f=1MHZ	20	pF
		V_R=1V,f=1MHZ	12	

NOTES:

1 Part mounted on FR-4 board with recommended pad layout.

2 Short duration pulse test used to minimize self-heating effect.


POWER DISSIPATION PD (W)
0.30
0.25
0.20
0.15
0.10
0.05
0.00
25
50
75
100
125
150
Ambient temperature Ta(℃)
Reverse Current (uA)
1000
100
10
1.0
0.1
TJ=100°C
TJ=25°C
Reverse Voltage VR (V)


HE
Unit: mm
HE 3.45 3.95
SOD-123

H

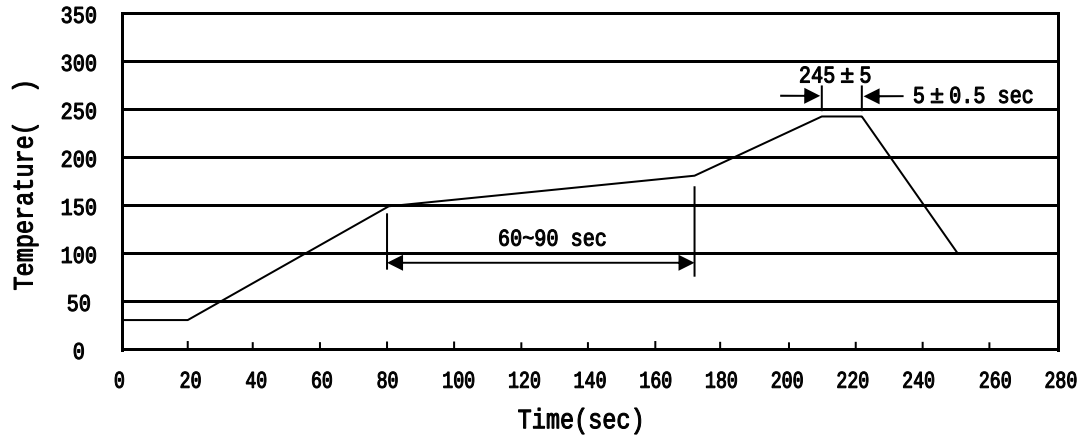
S9

Note:

H: Company Code

S9: 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.

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

/ REEL

Package Type	Units					Dimension		(unit mm³)
SOD-123	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205