

/ Descriptions

SOD-523

Silicon Diode in a SOD-523 Plastic Package.

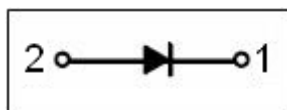
/ Features

Fast switching diodes,HF Product.

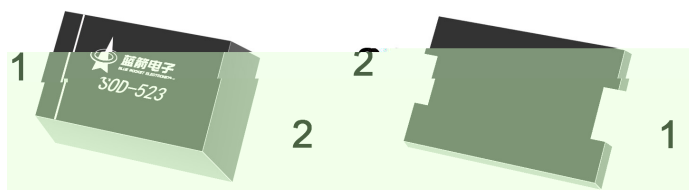
/ Applications

Small signal diode.

/ Equivalent Circuit



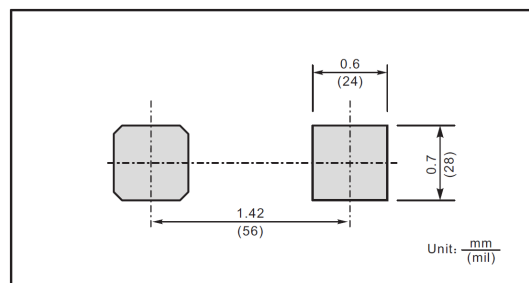
/ Pinning



PIN1:Cathode

PIN2:Anode

The recommended mounting pad size



/ Marking

Marking	T4
---------	----

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	75	V
Continuous Forward Current	I_F	150	mA
Non-reptitive Peak Forward Surge Current	I_{FSM} $t=1ms$	0.8	A
Power Dissipation	P_{tot}	150	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
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=1\text{ A}$	75			V
Forward Voltage	V_F	$I_F=1mA$			0.715	V
		$I_F=10mA$			0.855	V
		$I_F=50mA$			1.00	
		$I_F=150mA$			1.25	
Instantaneous Reverse Current	I_R	$V_R=20V$ $T_j = 25\text{ °C}$			0.025	A
		$V_R=75V$ $T_j = 25\text{ °C}$			1	
Junction Capacitance	C_j	$V_R=0V$ $f=1MHz$			2	pF
Maximum Reverse Recovery Time	t_{rr}	$I_F = 10m\text{ A}$ $I_R = 10mA$ $I_{rr} = 1m\text{ A}$ $R_L=100$			4	ns

/ Electrical Characteristic Curve

Fig.1 Power Derating Curve

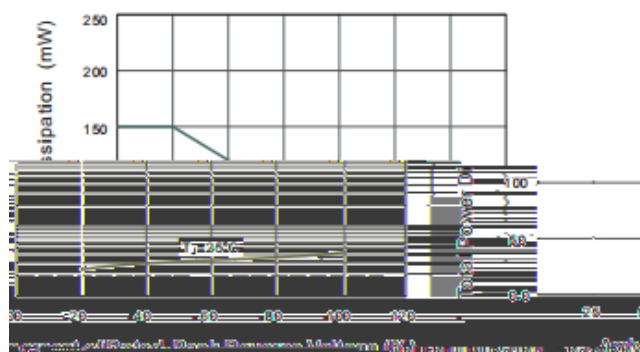
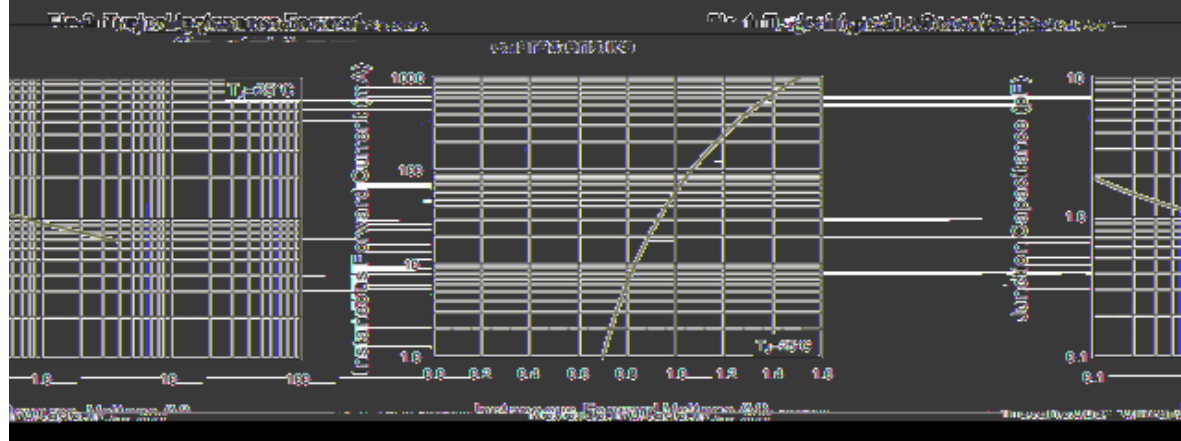
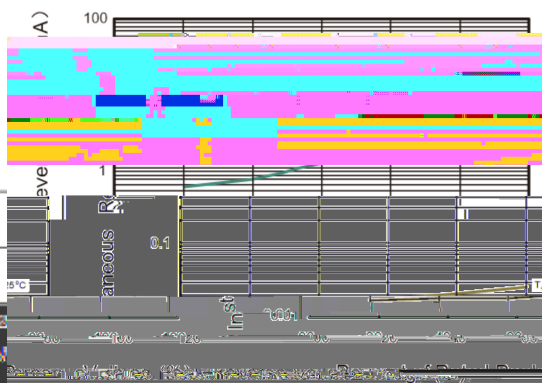
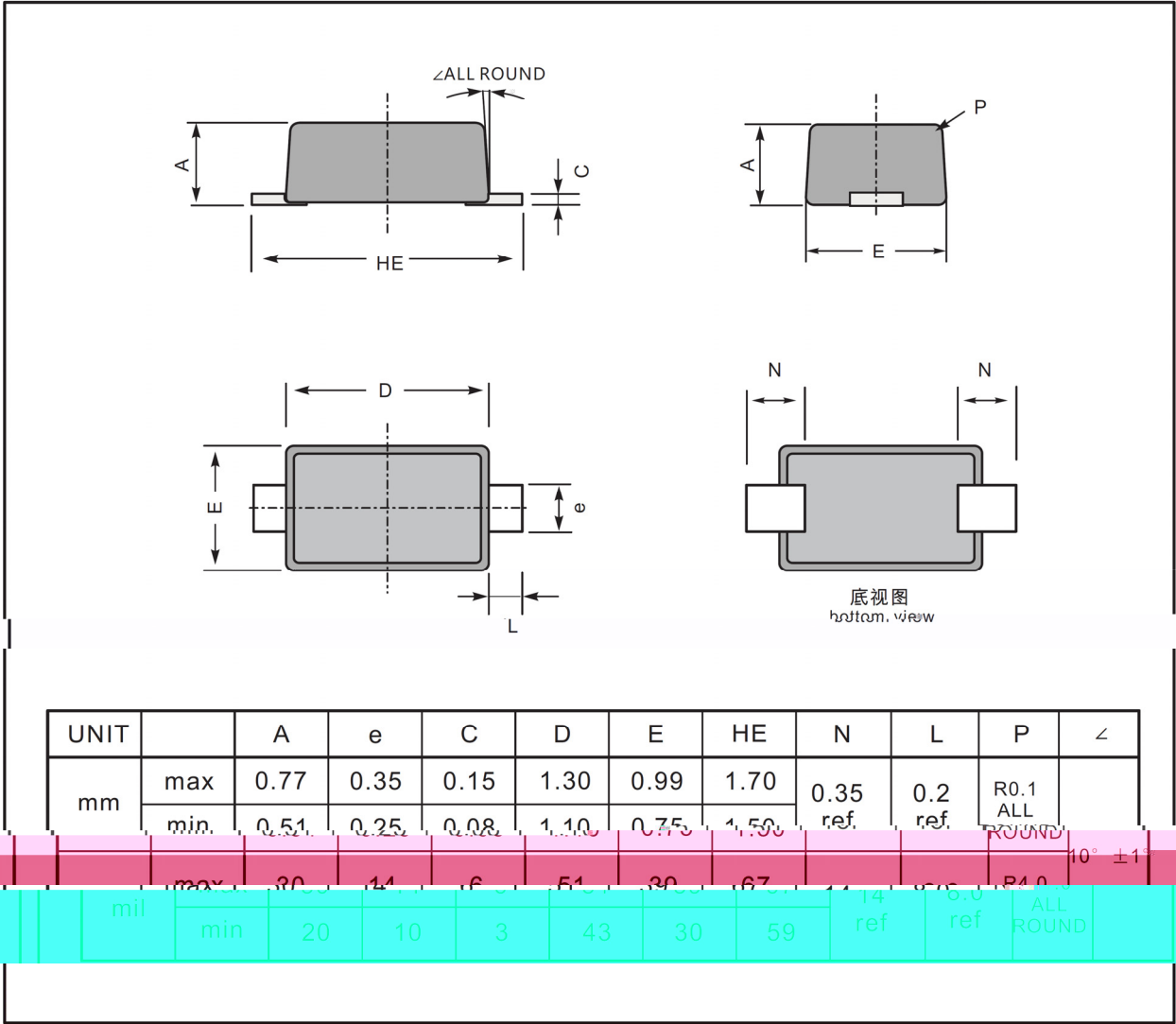


Fig.2 Typical Reverse Characteristics

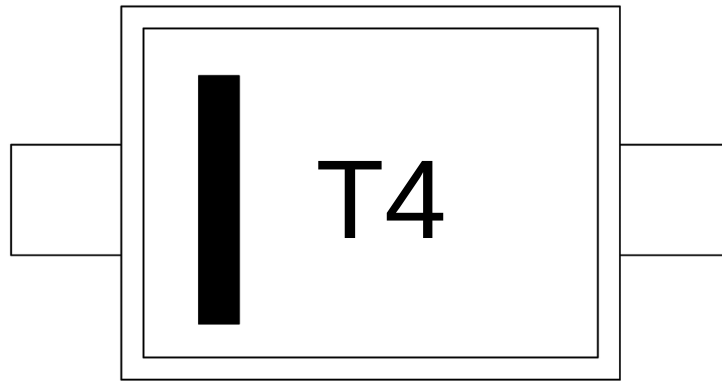


/ Package Dimensions

SOD-523



/ Marking Instructions

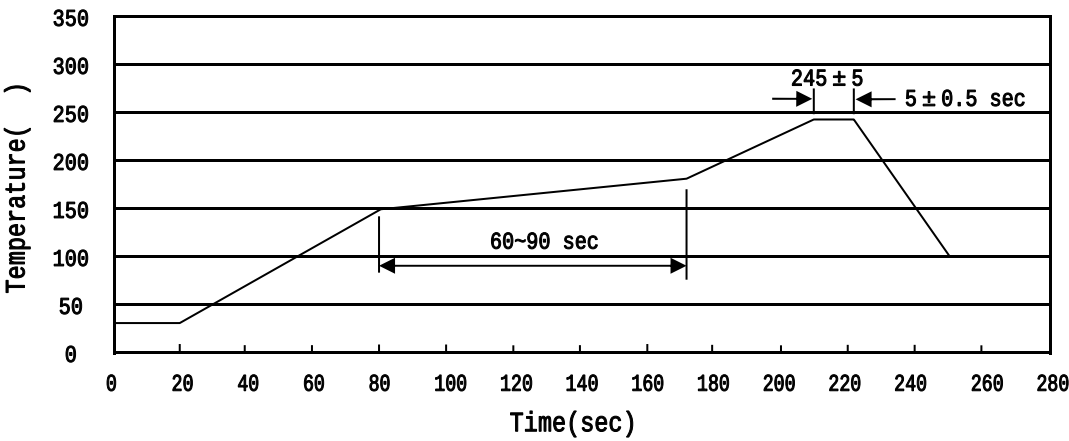


T4

Note:

T4: 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	Units					Dimension (unit mm ³)		
SOD-523	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices