

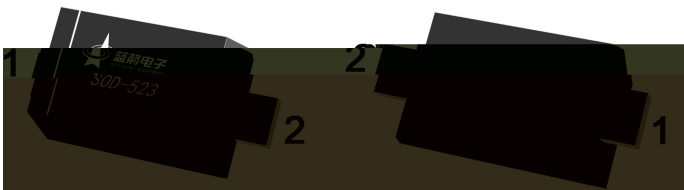
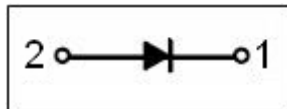
Rev.E Oct.-2025

SOD-523

Silicon Diode in a SOD-523 Plastic Package.

Fast switching diodes, HF Product.

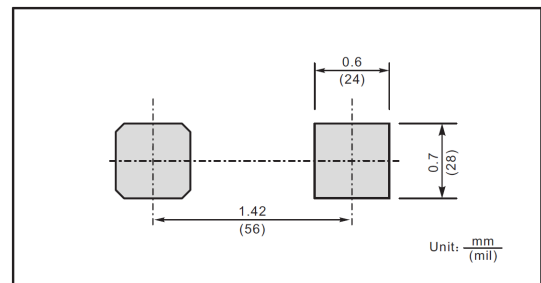
Small signal diode.



PIN1: Cathode

PIN2: Anode

The recommended mounting pad size



Marking	T4
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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-repetitive 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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=1\mu A$	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	$V_R=20V$ $T_j = 25\text{ }^\circ\text{C}$			0.025	μA
		$V_R=75V$ $T_j = 25\text{ }^\circ\text{C}$			1	
Junction Capacitance	C_j	$V_R=0V$ $f=1MHz$			2	pF
Maximum Reverse Recovery Time	t_{rr}	$I_F = 10mA$ $I_R = 10mA$ $I_{rr} = 1mA$ $R_L=100$			4	ns

Fig.1 Power Derating Curve

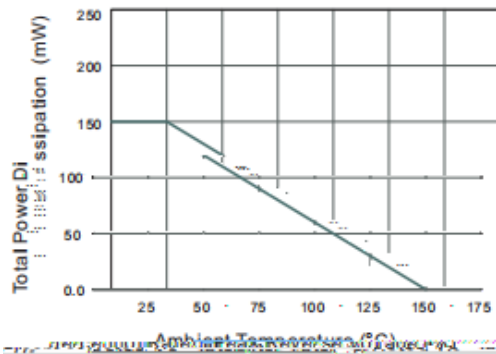
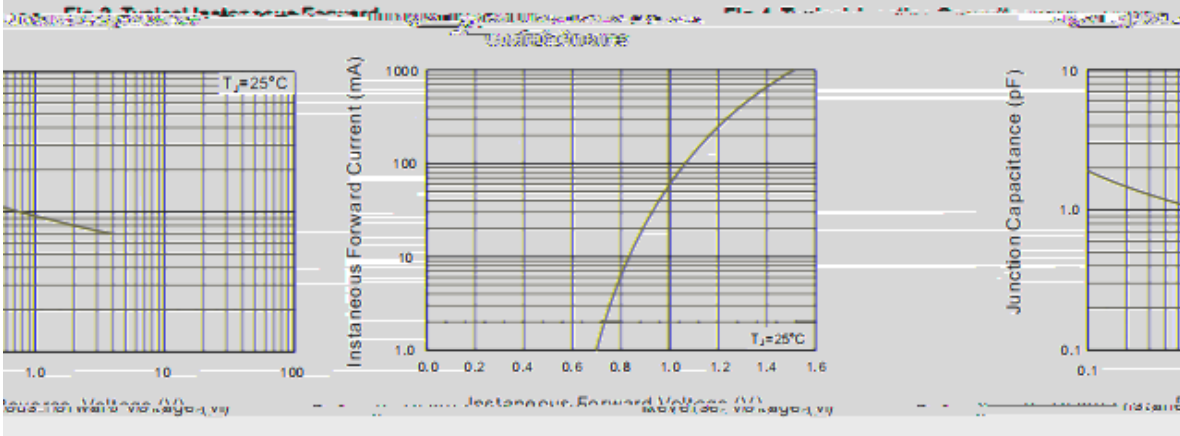
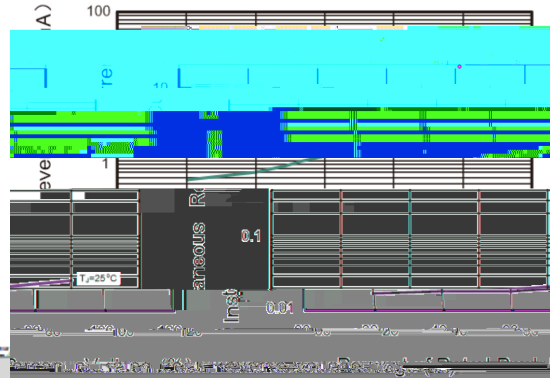
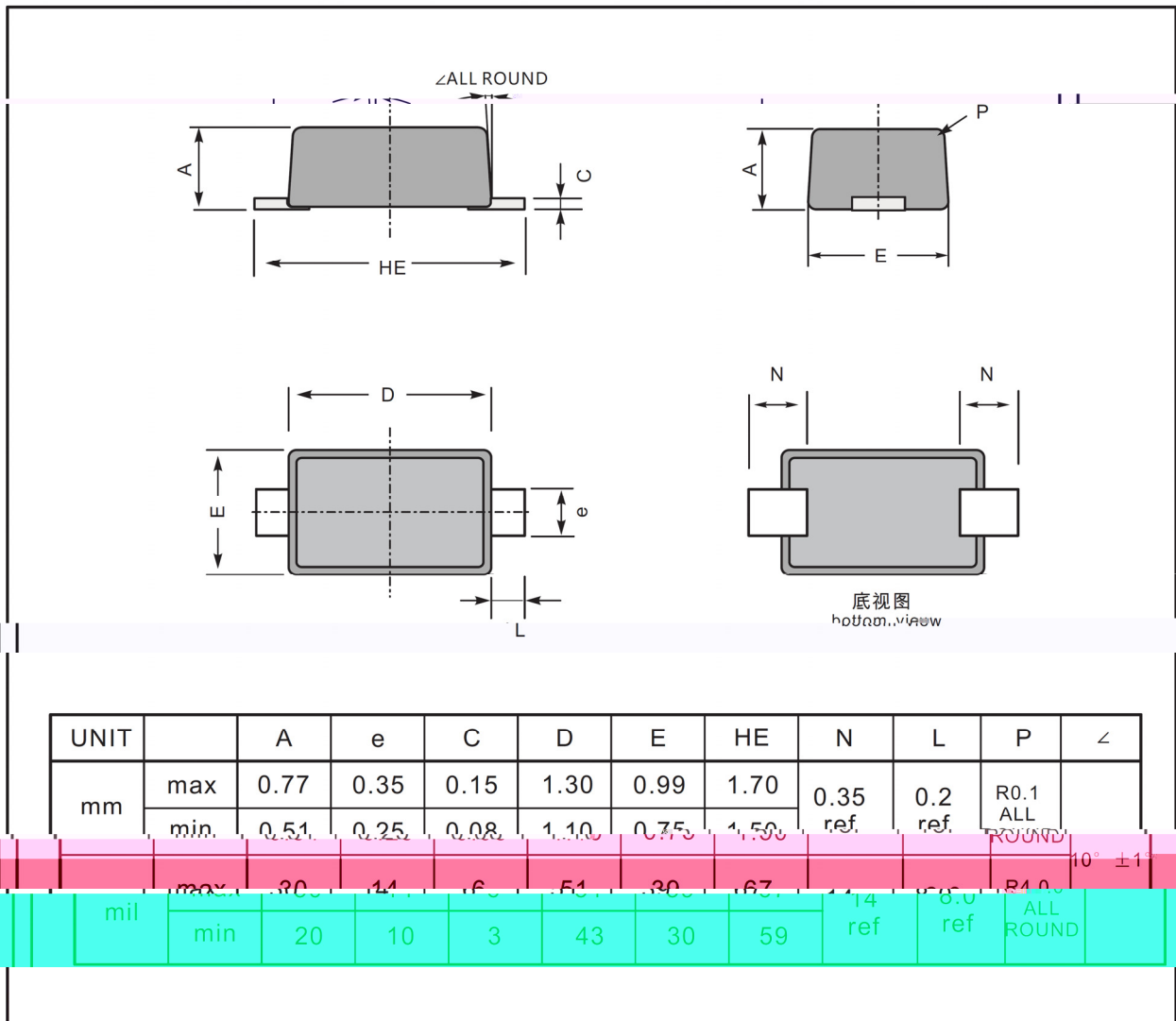
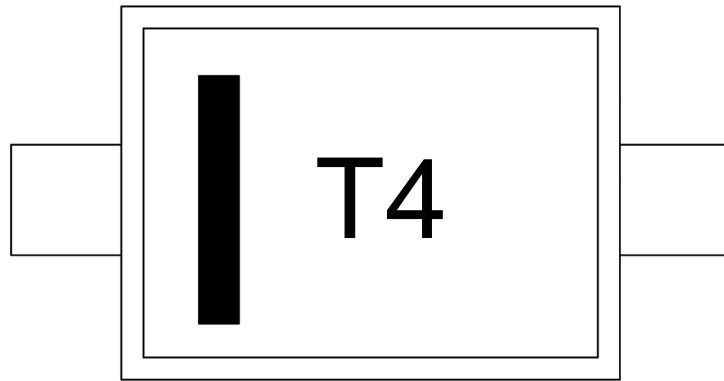


Fig.2 Typical Reverse Characteristics



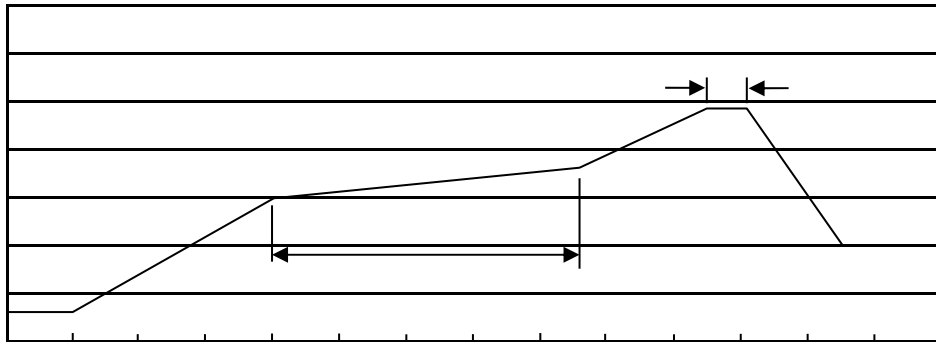
SOD-523




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. |

260±5

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
SOD-523	3,000	10	30,000	6	180,000	7 x8	180x120x180	390x385x205