## / Descriptions

SOD-523

Silicon Diode in a SOD-523 Plastic Package.

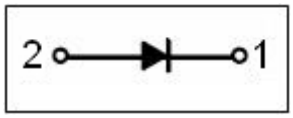
## / Features

Fast switching diodes,HF Product.

## / Applications

Small signal diode.

## / Equivalent Circuit

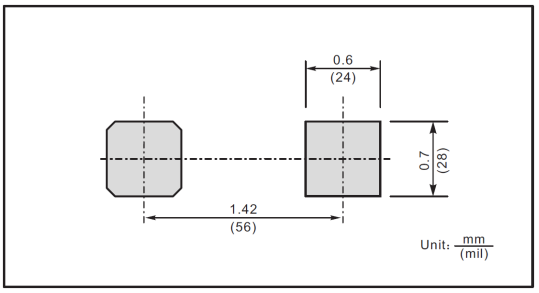



## / Pinning



PIN1:Cathode PIN2:Anode

The recommended mounting pad size




## / Marking

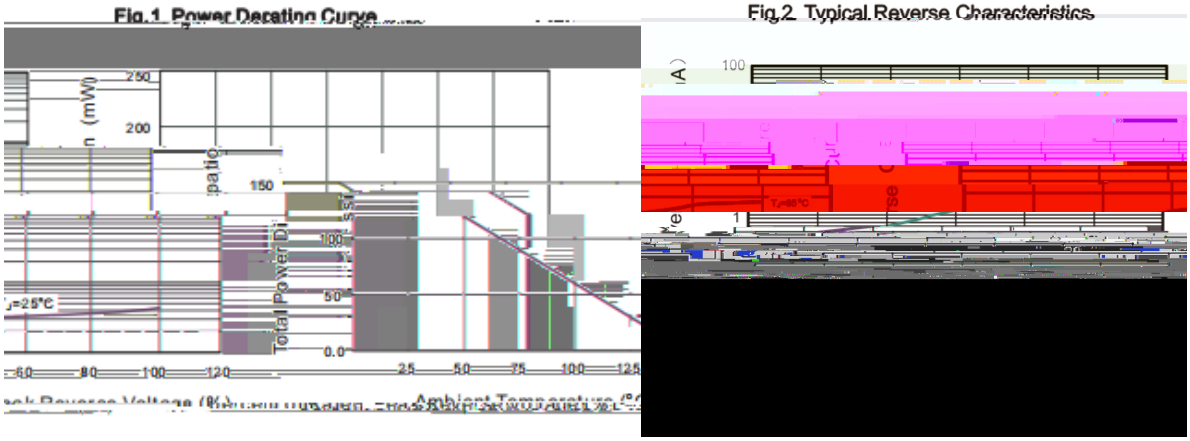
| | |
|---|---|
| Marking | T4 |

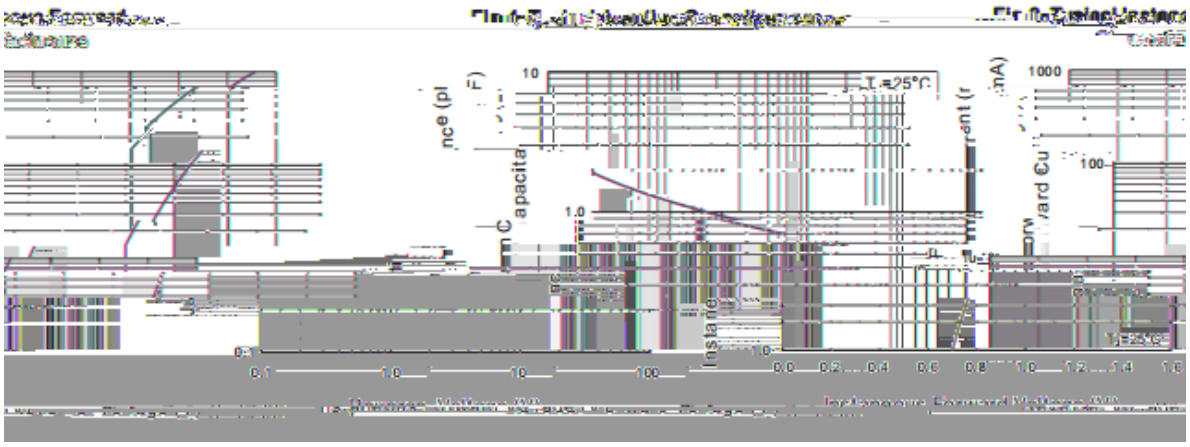
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 100 | V |
| Maximum RMS voltage | $V_{RMS}$ | 75 | V |
| Continuous Forward Current | $I_F$ | 150 | mA |
| Non-reptitive Peak Forward Surge Current | $I_{FSM}$ t=1ms | 0.8 | A |
| Power Dissipation | $P_{tot}$ | 150 | mW |
| Junction Temperature | $T_j$ | -55 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | $I_R$=1μA | 75 | | | V |
| | | $I_F$=1mA | | | 0.715 | V |
| | | | | | 0.855 | |

V V

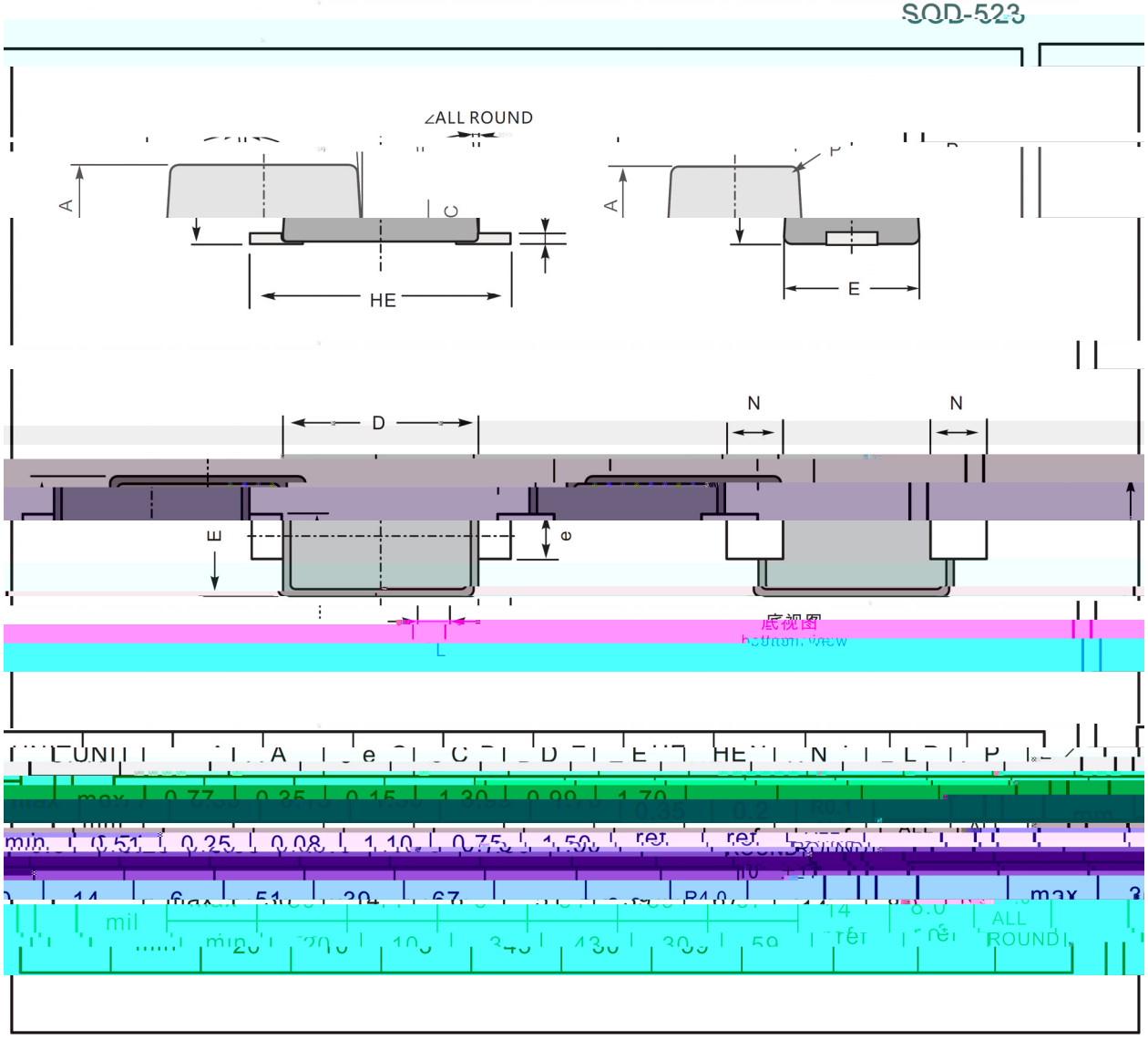
## / Electrical Characteristic Curve



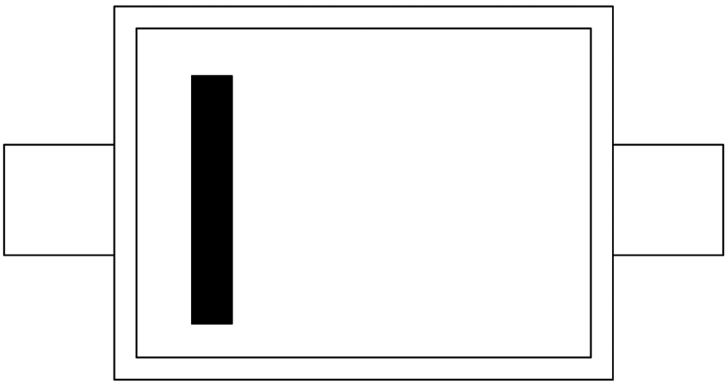
## / Package Dimensions

SOD-523




| UNIT | A | e | C | D | E | HE | N | L | P |
|---|---|---|---|---|---|---|---|---|---|
| max | 0.77 | 0.35 | 0.15 | 1.30 | 0.90 | 1.70 | | 0.35 | 0.2 |
| min | 0.51 | 0.25 | 0.08 | 1.10 | 0.75 | 1.50 | ref. | ref. | |
| mil | max | 51 | 30 | 67 | | | | 14 | 8.0 |
| | min | 20 | 10 | 43 | 30 | 59 | ref. | ref. | ALL ROUND |

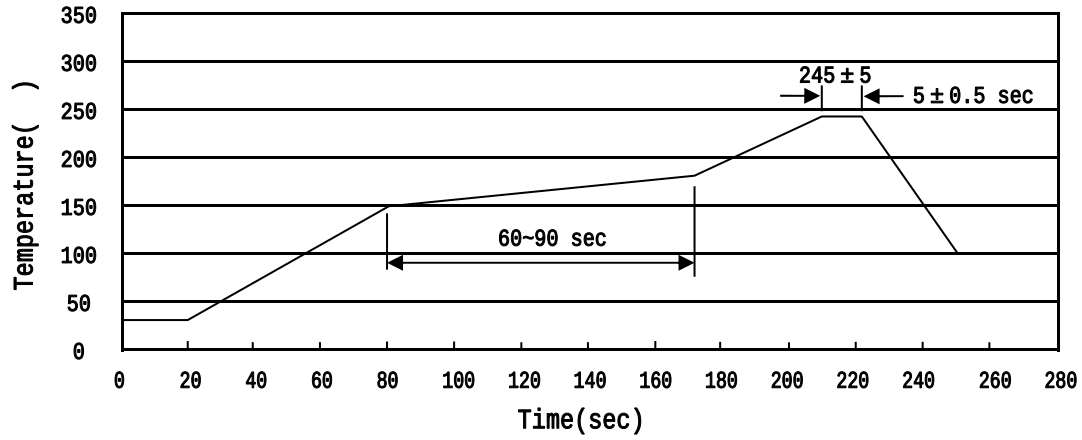
## / Marking Instructions



T4

T563.5ye

## ( ) / 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 mm³) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| SOD-523 | 3,000 | 10 | 30,000 | 6 | 180,000 | 7 ×8 | 180×120×180 | 390×385×205 |

## / Notices