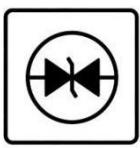


ESD



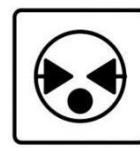
TVS



TSS



MOV



GDT



PLED

RB521S30T1G(MS)

Product specification

Features

- UltraSmallmoldtype.(SOD-523)
- LowIR
- Highreliability.

Applications

- Lowcurrentrectification

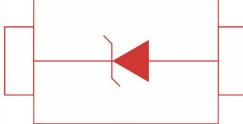
Construction

- Siliconepitaxialplanar

MechanicalCharacteristics

- Leadfinish:100%matteSn(Tin)
- Mountingposition:Any
- Qualifiedmaxreflowtemperature:260 °C
- DevicemeetsMSL1requirements
- Puretinplating:7~17um
- Pinflatness: \leq 3mil

Reference News

| Outline | Pin Configuration | Marking |
|---|--|--|
|  SOD-523 |  |  |

Electricalcharacteristicsperline@25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------|--------|------|------|------|---------|-------------|
| Forward voltage | V_F | - | - | 0.5 | V | $I_F=200mA$ |
| Reverse current | I_R | - | - | 30 | μA | $V_R=10V$ |

Absolute maximum rating@25°C

| Parameter | Symbol | limits | Unit |
|--|-----------|-------------|------|
| Reverse voltage (DC) | V_{RM} | 30 | V |
| Average rectified forward current | I_o | 200 | mA |
| Forward current surge peak (60Hz 1cyc) | I_{FSM} | 1 | A |
| Operating Junction temperature Range | T_j | -55 to 125 | °C |
| Storage temperature | T_{stg} | -40 to +125 | °C |

Typical Characteristics

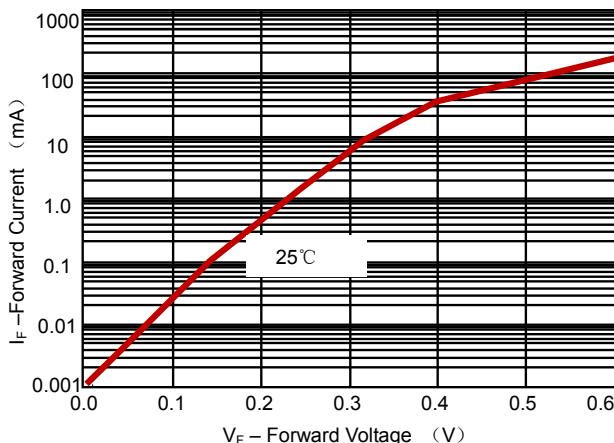


Fig 1. Forward Voltage

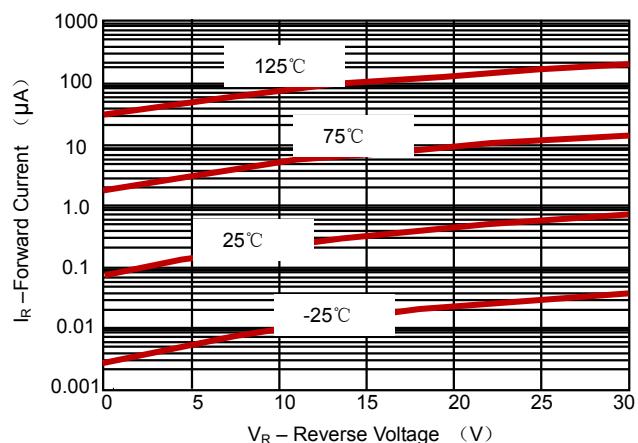


Fig 2. Leakage Current

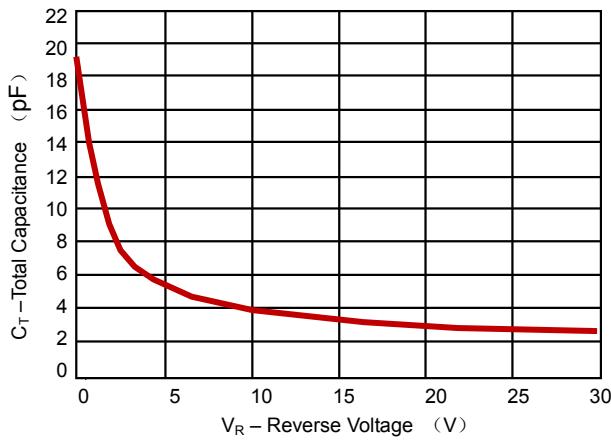
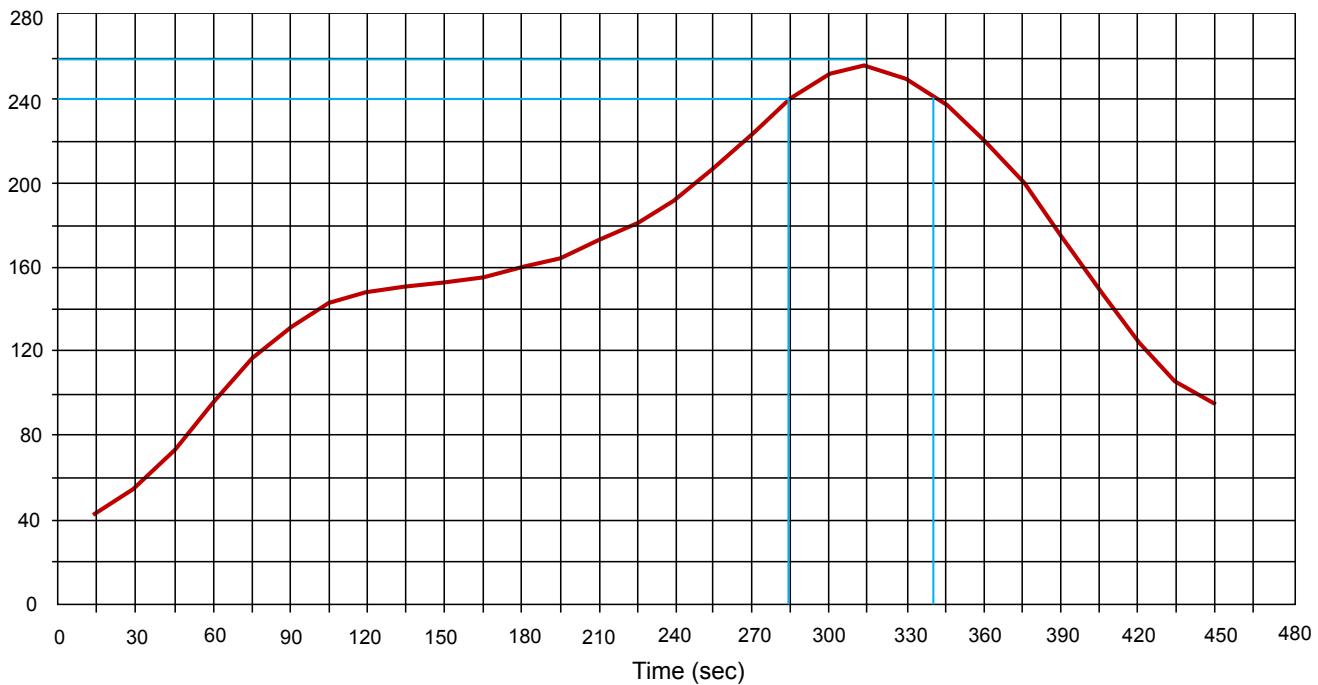


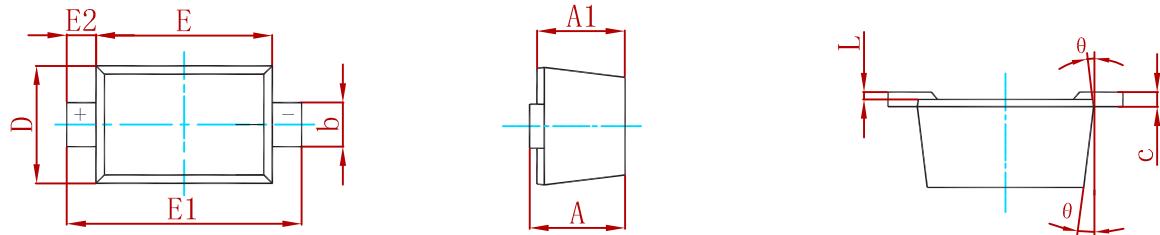
Fig 3. Total Capacitance

Solder Reflow Recommendation

Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec

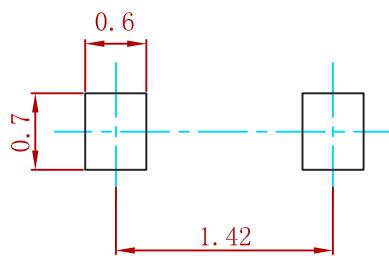


PACKAGE MECHANICAL DATA



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.510 | 0.770 | 0.020 | 0.031 |
| A1 | 0.500 | 0.700 | 0.020 | 0.028 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 0.750 | 0.850 | 0.030 | 0.033 |
| E | 1.100 | 1.300 | 0.043 | 0.051 |
| E1 | 1.500 | 1.700 | 0.059 | 0.067 |
| E2 | 0.200 REF | | 0.008 REF | |
| L | 0.010 | 0.070 | 0.001 | 0.003 |
| θ | 7° REF | | 7° REF | |

Suggested Pad Layout



Note:
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

REELSPECIFICATION

| P/N | PKG | QTY |
|-----------------|---------|------|
| RB521S30T1G(MS) | SOD-523 | 3000 |

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