

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

RB521CS-30-MS

Product specification

Feature

- Ultra Small mold type. SOD-923
- Low IR
- High reliability

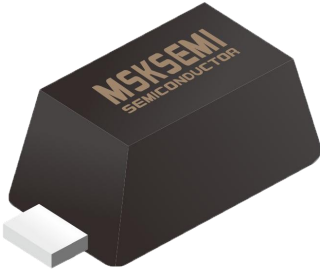
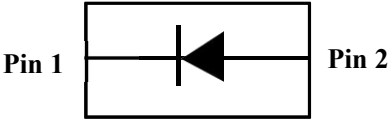
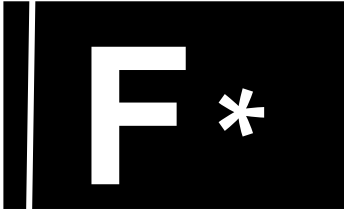
Applications

- Low current rectification

Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um
- Pin flatness:≤3mil

Reference News

| PACKAGE OUTLINE | PIN CONFIGURATION | Marking |
|---|---|---|
|  |  |  |
| <p>SOD-923</p> | | |

Electrical characteristics per line@25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------|--------|------|------|------|---------------|----------------------|
| Forward voltage | V_F | - | 0.27 | 0.31 | V | $I_F = 1\text{mA}$ |
| Forward voltage | V_F | - | 0.30 | 0.35 | V | $I_F = 10\text{mA}$ |
| Forward voltage | V_F | - | 0.36 | 0.40 | V | $I_F = 20\text{mA}$ |
| Forward voltage | V_F | - | 0.48 | 0.55 | V | $I_F = 100\text{mA}$ |
| Reverse current | I_R | - | - | 1.5 | μA | $V_R = 10\text{V}$ |

Absolute maximum rating@25°C

| Parameter | Symbol | limits | Unit |
|--|-----------|-------------|------|
| Reverse voltage (DC) | V_{RM} | 30 | V |
| Average rectified forward current | I_o | 100 | mA |
| Forward current surge peak (60Hz 1cyc) | I_{FSM} | 500 | mA |
| Operating Junction temperature Range | T_j | -55 to 125 | °C |
| Storage temperature | T_{stg} | -40 to +125 | °C |

Typical Characteristics

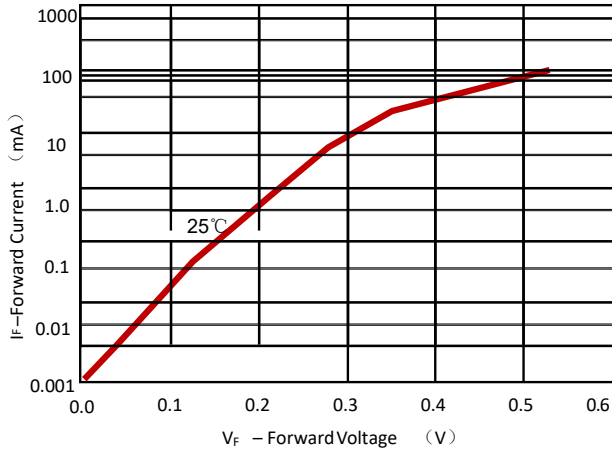


Fig 1. Forward Voltage

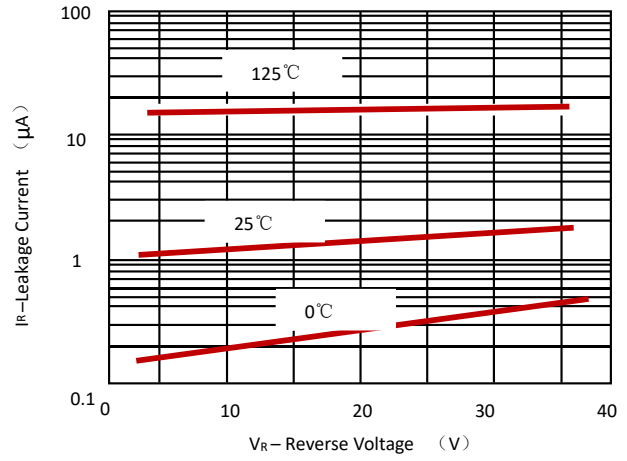


Fig 2. Leakage Current

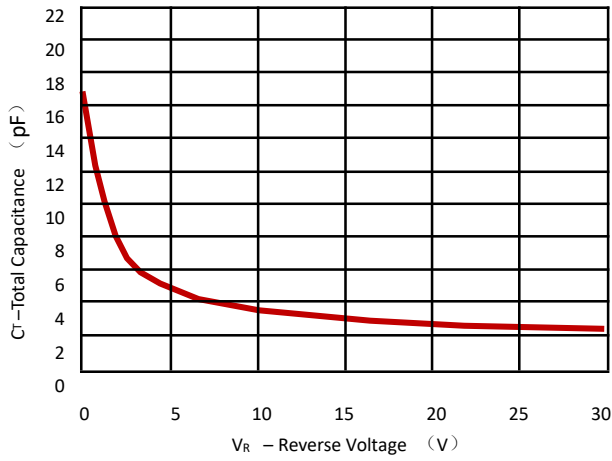
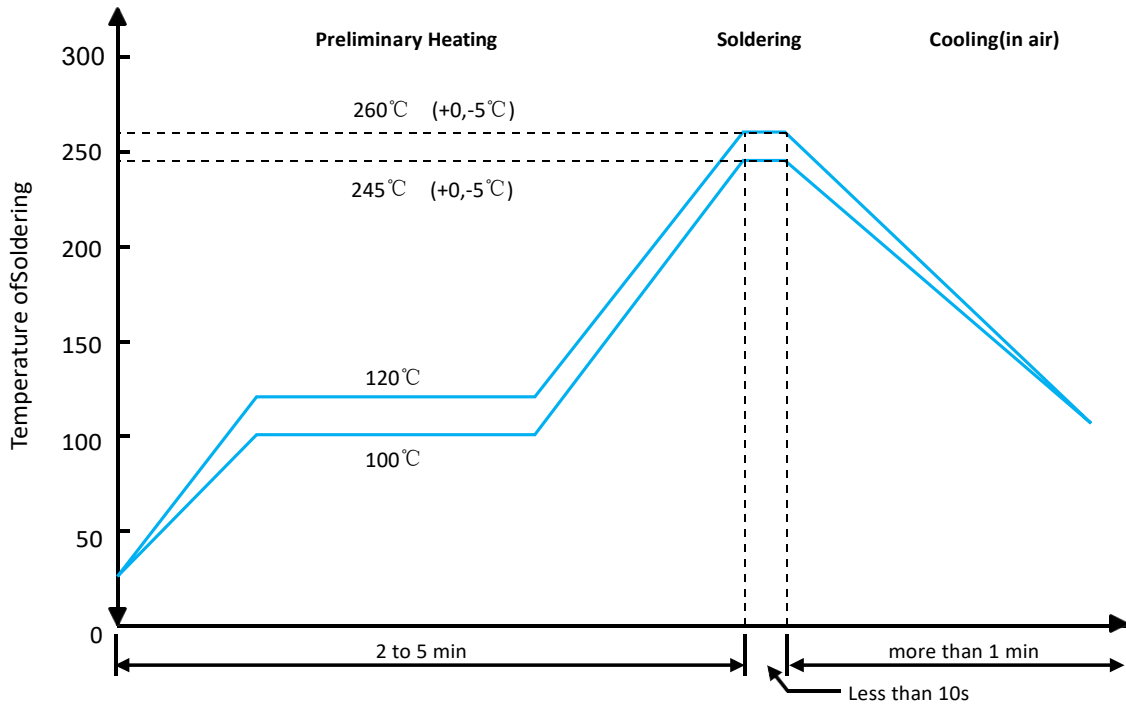


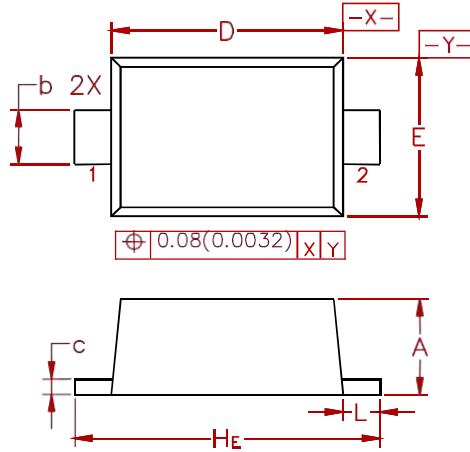
Fig 3. Total Capacitance

Solder Reflow Recommendation



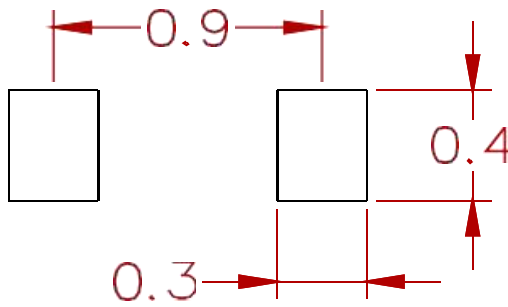
Remark: Pb free for 260°C; Pb for 245°C.

PACKAGE MECHANICAL DATA



| Dim | Millimeters | | | Inches | | |
|-----|-------------|------|------|--------|-------|-------|
| | Min | Nom | Max | Min | Nom | Max |
| A | 0.36 | 0.40 | 0.43 | 0.014 | 0.016 | 0.017 |
| b | 0.15 | 0.20 | 0.25 | 0.006 | 0.008 | 0.010 |
| c | 0.07 | 0.12 | 0.17 | 0.003 | 0.005 | 0.007 |
| D | 0.75 | 0.80 | 0.85 | 0.030 | 0.031 | 0.033 |
| E | 0.55 | 0.60 | 0.65 | 0.022 | 0.024 | 0.026 |
| HE | 0.95 | 1.00 | 1.05 | 0.037 | 0.039 | 0.041 |
| L | 0.05 | 0.10 | 0.15 | 0.002 | 0.004 | 0.006 |

Suggested Pad Layout



Dimensions: Millimeters

REEL SPECIFICATION

| P/N | PKG | QTY |
|---------------|---------|------|
| RB521CS-30-MS | SOD-923 | 8000 |

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