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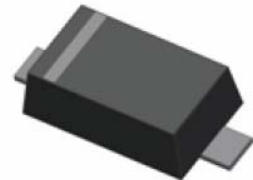
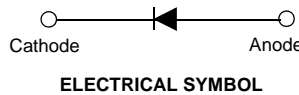
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RB520S30

Schottky Barrier Diodes

Features

- Low Forward Voltage Drop
- Flat Lead, Surface Mount Device Under 0.70mm Height
- Extremely Small Outline Plastic Package SOD523F
- Moisture Level Sensitivity 1
- Pb-free Version and RoHS Compliant
- Matte Tin (Sn) Lead Finish
- Green Mold Compound



SOD-523F
Band Indicates Cathode
RB520S30 Marking : 1B

Absolute Maximum Ratings * $T_A=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | Units |
|-------------|--------------------------------------|-------------|------------------|
| V_{RRM} | Maximum Repetitive Reverse Voltage | 30 | V |
| $I_{F(AV)}$ | Average Rectified Forward Current | 200 | mA |
| T_J | Operating Junction Temperature Range | -55 to +125 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature Range | -55 to +125 | $^\circ\text{C}$ |

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

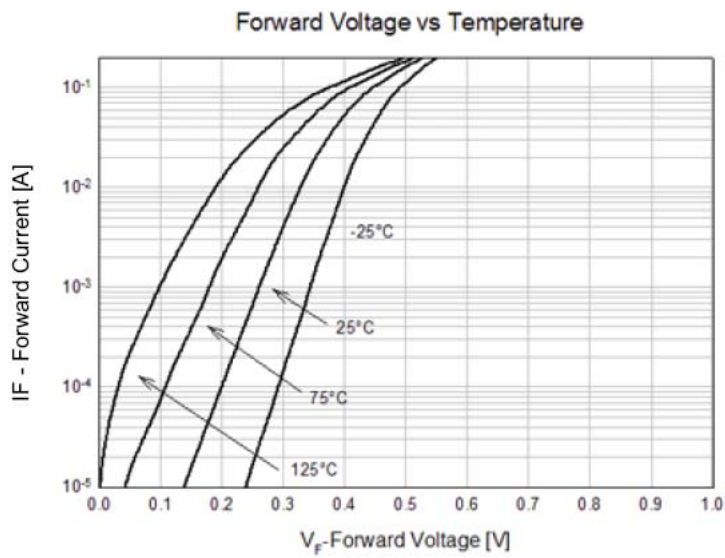
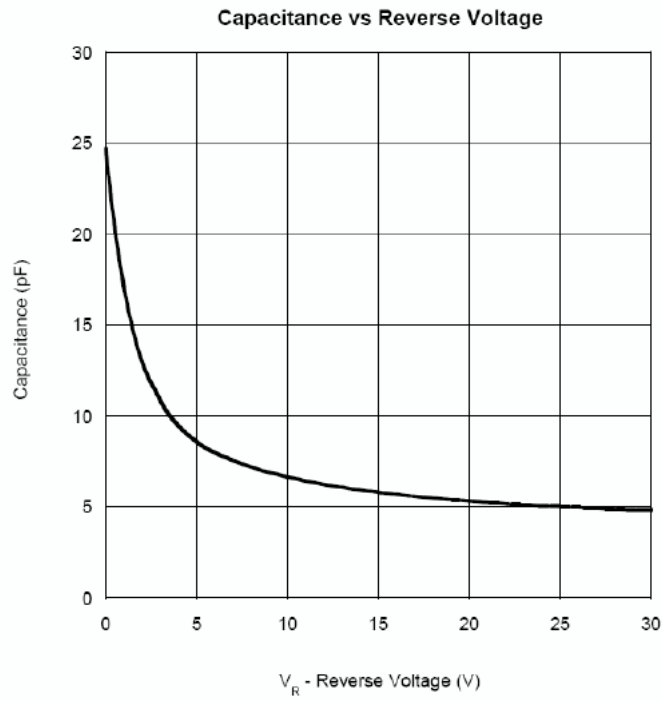
| Symbol | Parameter | Value | Units |
|-----------------|---|-------|---------------------------|
| P_D | Total Device Dissipation ($T_C=25^\circ\text{C}$) | 200 | mW |
| $R_{\theta JA}$ | Thermal Resistance, Junction to Ambient | 500 | $^\circ\text{C}/\text{W}$ |

* Device mounted on FR-4 PCB minimum land pad.

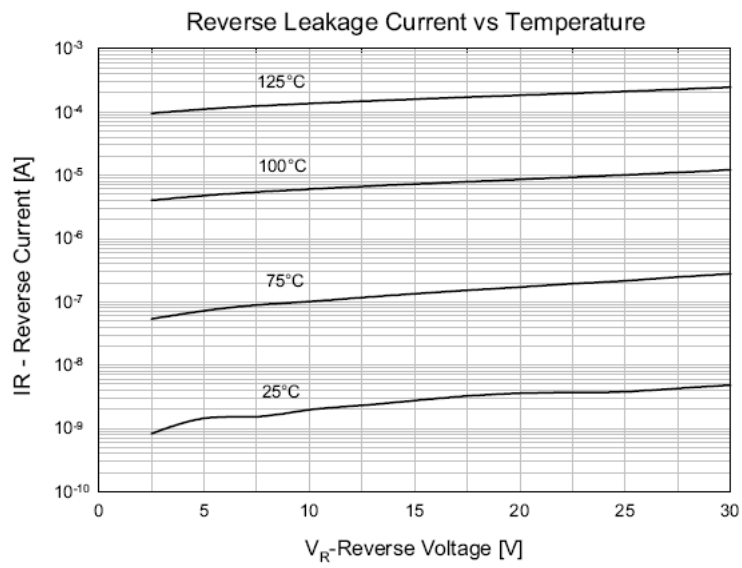
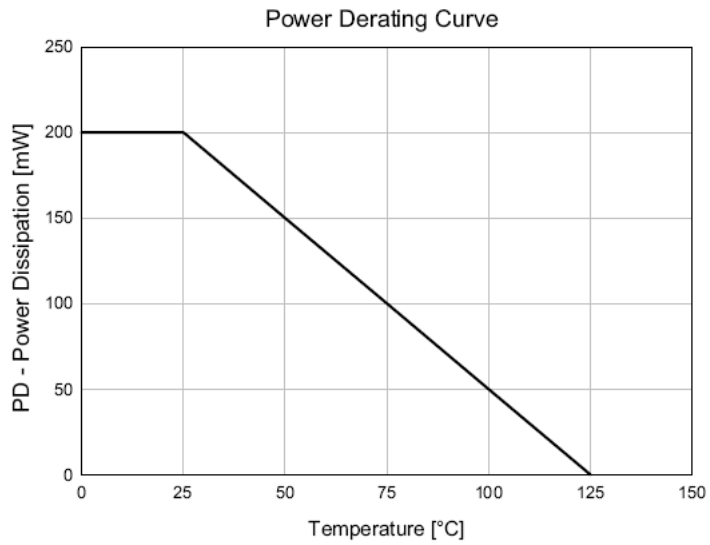
Electrical Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Typ. | Max. | Units |
|--------|-------------------------|----------------------|------|------|------|---------------|
| BV_R | Breakdown Voltage | $I_R=500\mu\text{A}$ | 30 | | | V |
| I_R | Reverse Leakage Current | $V_R=10\text{V}$ | | | 1 | μA |
| V_F | Forward Voltage | $I_F=200\text{mA}$ | | | 0.6 | V |

Typical Performance Characteristics

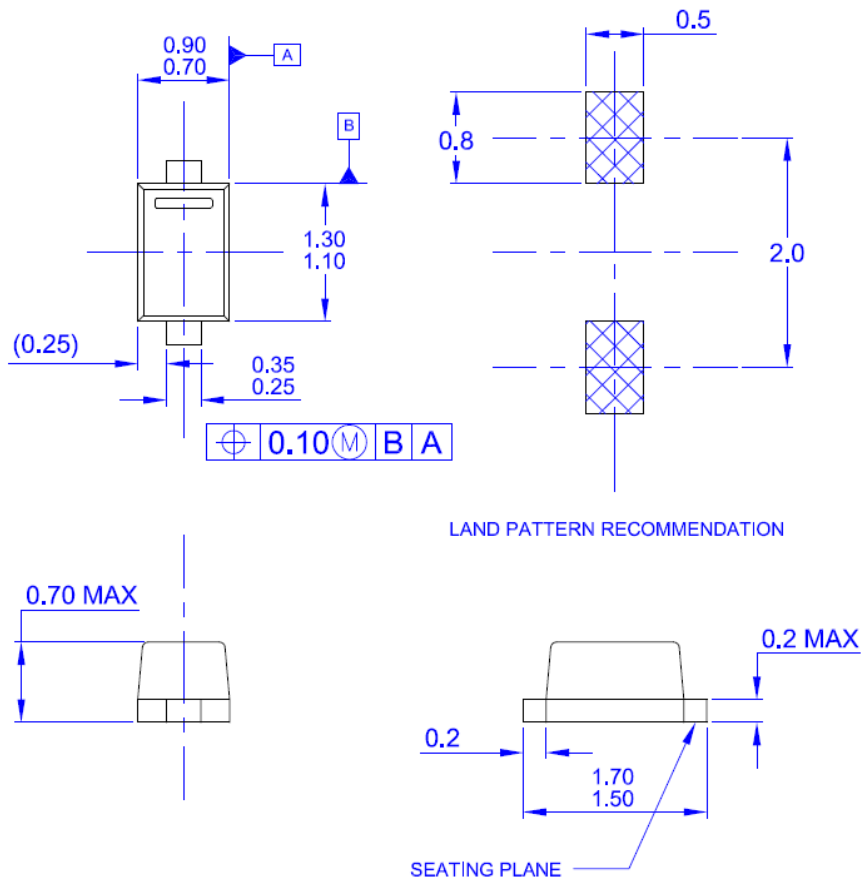


Typical Performance Characteristics (Continue)



Physical Dimension

SOD-523F









NOTES: UNLESS OTHERWISE SPECIFIED

- A) PACKAGE REFERENCE: THIS PACKAGE OUTLINE CONFORMS TO JEITA SC-79.
- B) ALL DIMENSIONS ARE IN MILLIMETERS.
- C) DRAWING CONFORMS TO ASME Y14.5M - 1994
- D) DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR EXTRUSIONS.
- E) LANDPATTERN RECOMMENDATION IS BASED ON IPC7351A STANDARD SOD1609X65M.
- F) DRAWING NUMBER AND REVISION: MKT-SOD523F1rev1



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