

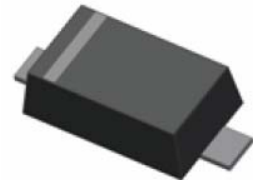
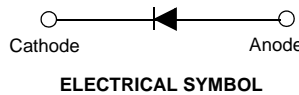


# RB751S40

## 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  
RB751S40 Marking : 4B

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

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	40	V
$I_{F(AV)}$	Average Rectified Forward Current	30	mA
$I_{FSM}$	Non-Repetitive Peak Forward Current	500	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

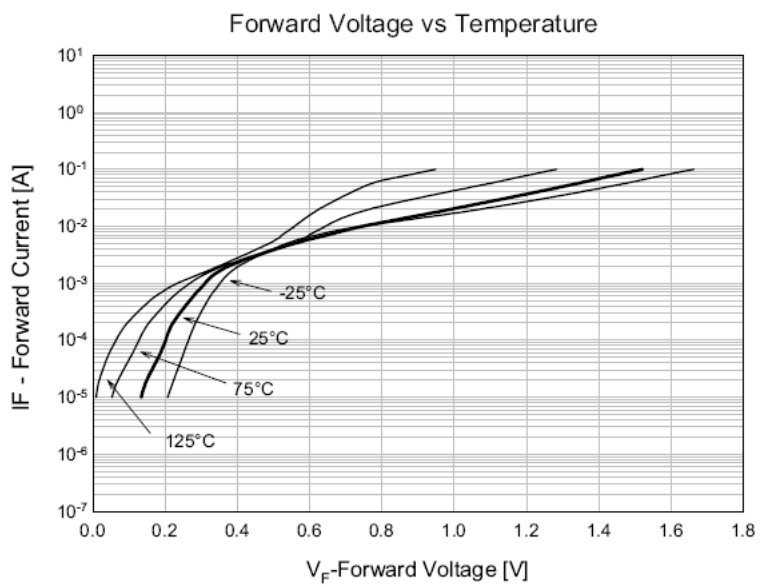
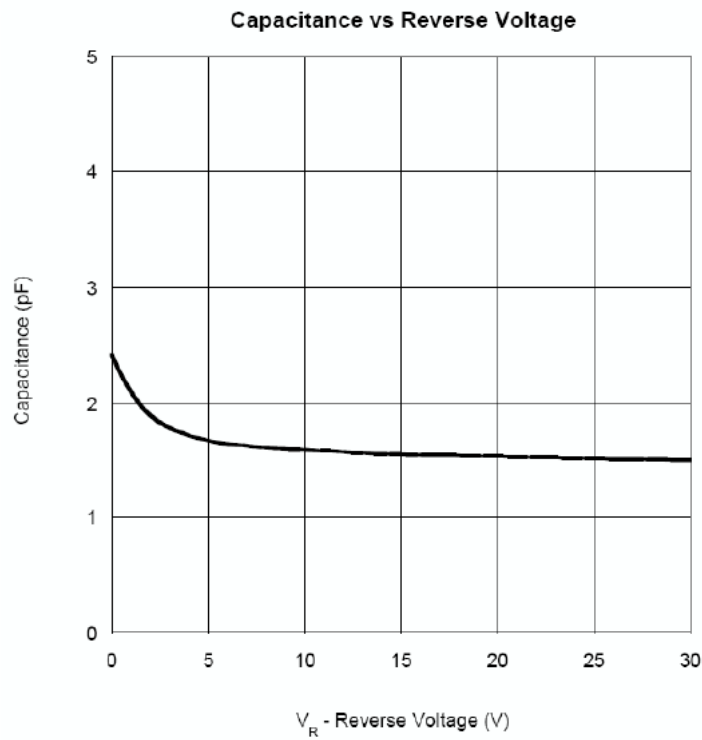
Symbol	Parameter	Value	Units
$P_D$	Total Device Dissipation ( $T_C=25^\circ\text{C}$ )	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	500	$^\circ\text{C}/\text{W}$

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

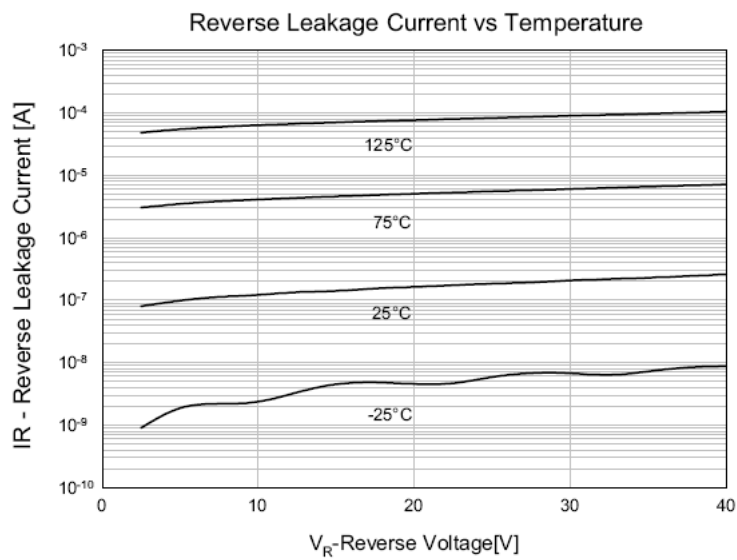
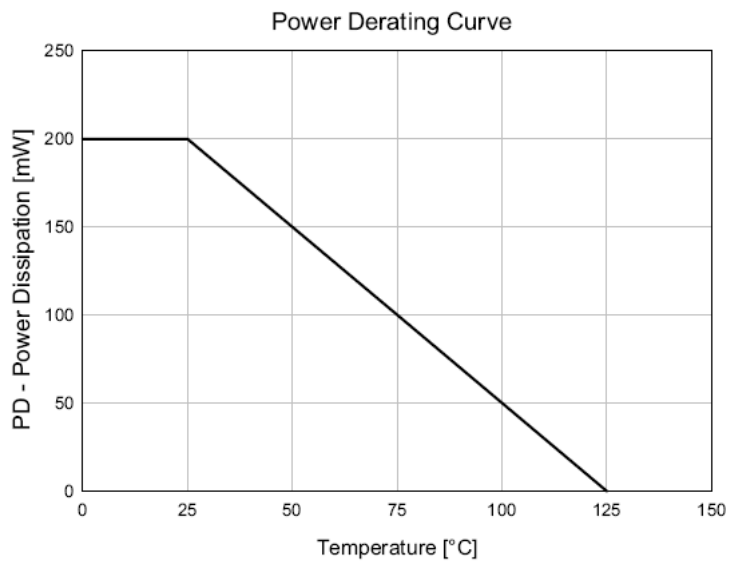
### Electrical Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_R$	Breakdown Voltage	$I_R=10\mu\text{A}$	30			V
$I_R$	Reverse Leakage Current	$V_R=30\text{V}$			0.5	$\mu\text{A}$
$V_F$	Forward Voltage	$I_F=1\text{mA}$			0.37	V

### Typical Performance Characteristics

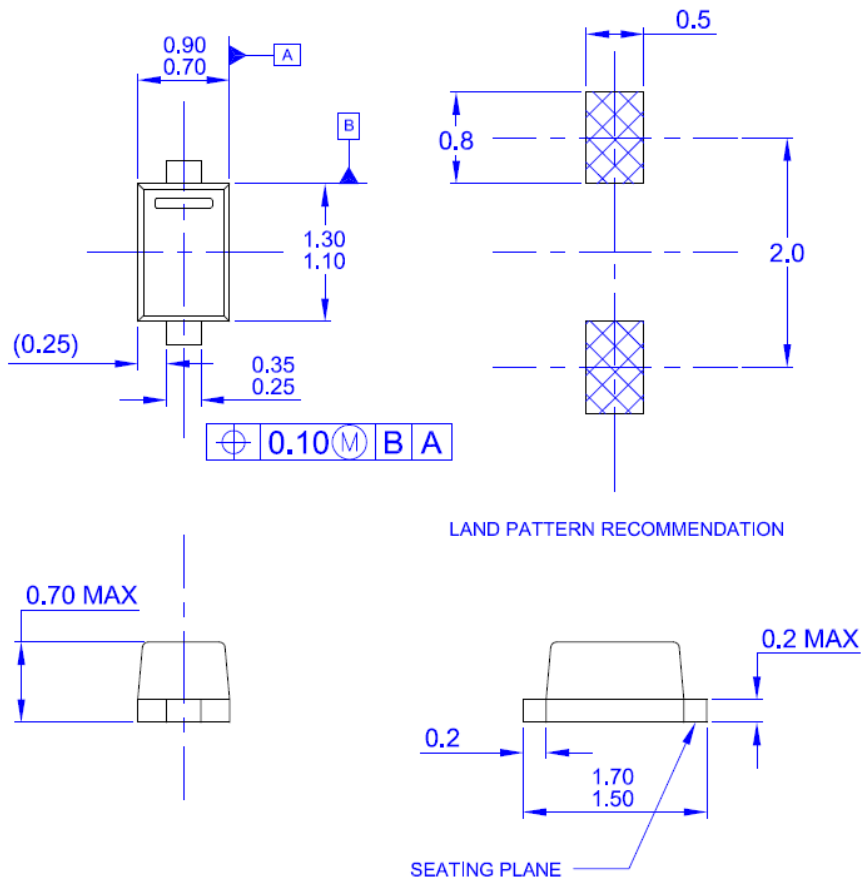


### Typical Performance Characteristics (Continue)



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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- |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
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| Auto-SPM™                                                                         | F-PFS™                                                                            | PowerXS™                                                                          | the power franchise                                                                 |
| Build it Now™                                                                     | FRFET®                                                                            | Programmable Active Droop™                                                        | TinyBoost™                                                                          |
| CorePLUS™                                                                         | Global Power Resource™                                                            | QFET®                                                                             | TinyBuck™                                                                           |
| CorePOWER™                                                                        | Green FPS™                                                                        | QS™                                                                               | TinyCalc™                                                                           |
| CROSSVOLT™                                                                        | Green FPS™ e-Series™                                                              | Quiet Series™                                                                     | TinyLogic®                                                                          |
| CTL™                                                                              | Gmax™                                                                             | RapidConfigure™                                                                   | TINYOPTO™                                                                           |
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| FastvCore™                                                                        | OPTOPLANAR®                                                                       | SyncFET™                                                                          | VisualMax™                                                                          |
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