

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

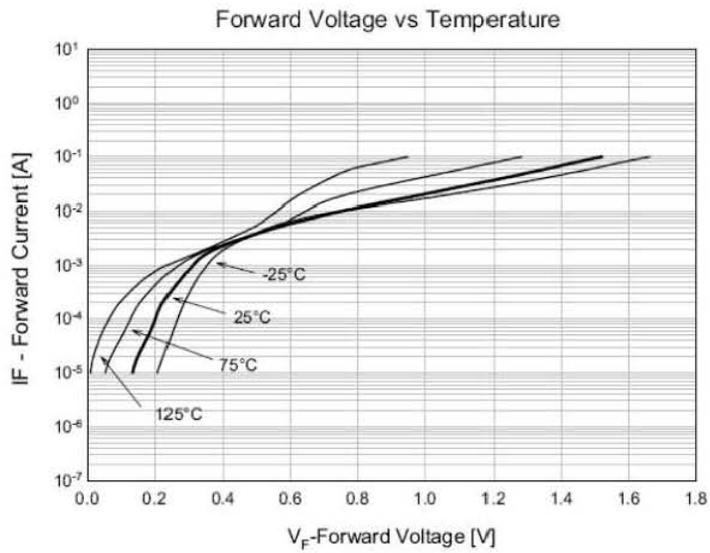
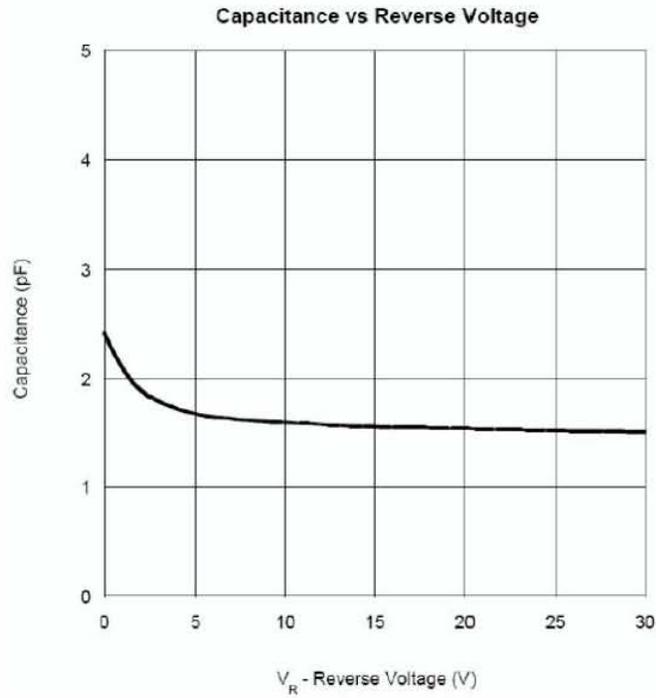
Symbol	Parameter	Value	Units
P_D	Total Device Dissipation ($T_C=25^\circ\text{C}$)	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	500	$^\circ\text{C}/\text{W}$

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

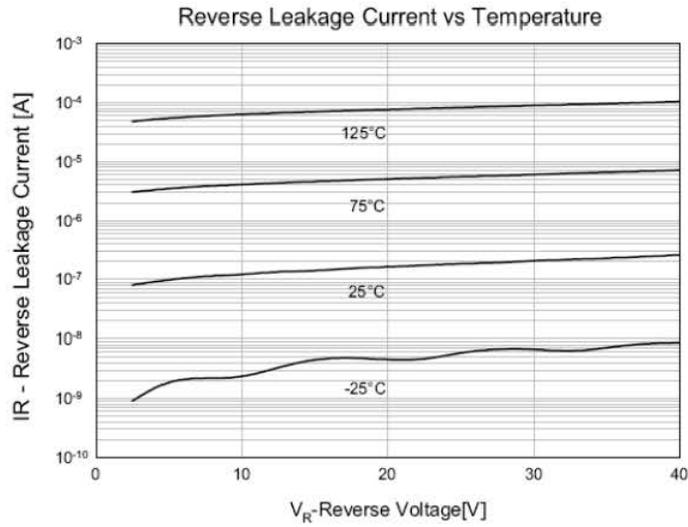
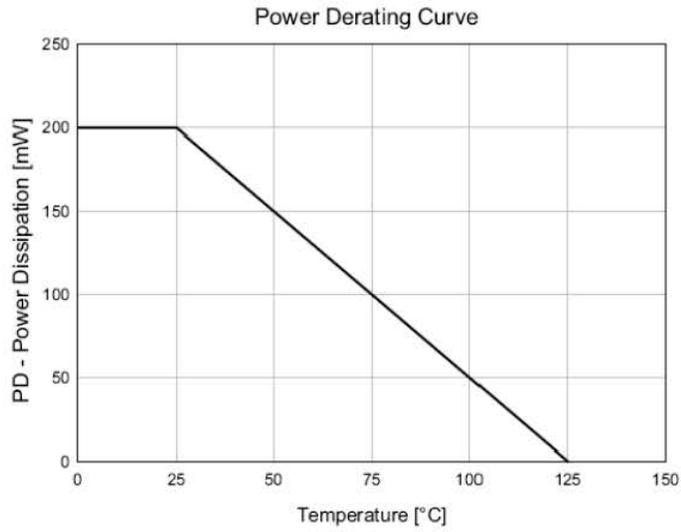
Electrical Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

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	μA
V_F	Forward Voltage	$I_F=1\text{mA}$			0.37	V

Typical Performance Characteristics

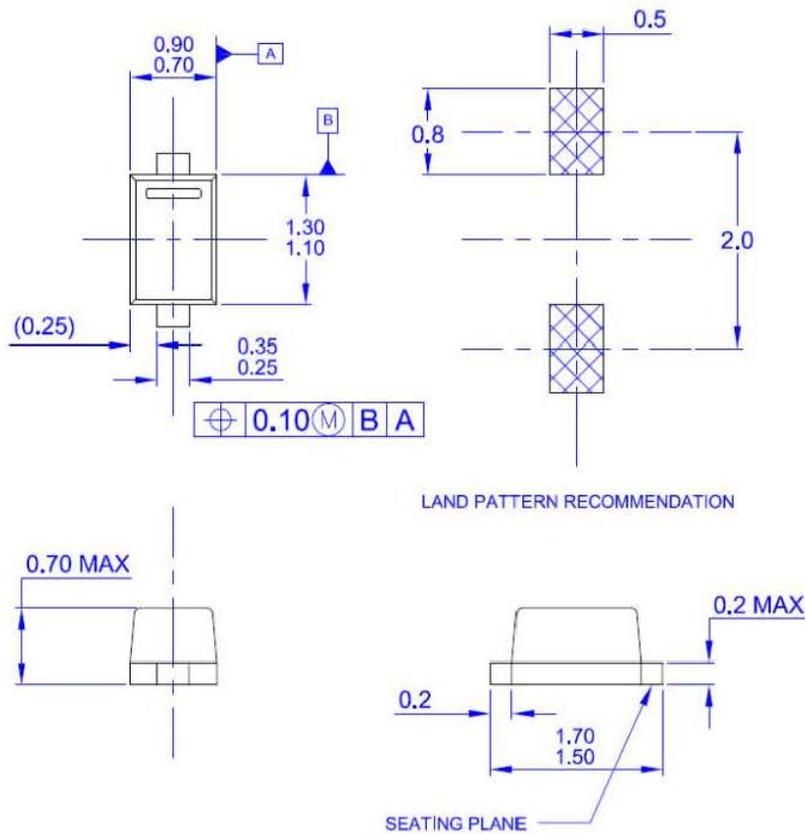


Typical Performance Characteristics (Continue)



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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