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FAIRCHILD SEMICONDUCTOR®

October 2010

RB751SL
Schottky Barrier Diodes

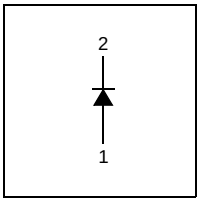
Features

- Low Forward Voltage Drop
- Fast switching
- Very Small and Thin SMD package
- Profile height, 0.43mm max
- Footprint, 1.0 x 0.6mm



SOD-923F
Marking: AD

Connection Diagram



Absolute Maximum Ratings * T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	30	V
$I_{F(AV)}$	Average Rectified Forward Current	30	mA
I_{FSM}	Forward Surge Current (8.3mS Single Half Sine-Wave)	200	mA
P_D	Power Dissipation	227	mW
T_J, T_{STG}	Operating Junction & Storage Temperature Range	-55 to +150	°C

* These ratings are limiting values above which the serviceability of the diode may be impaired.
The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient *	550	°C/W

* Minimum land pad.

Electrical Characteristics T_A=25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min.	Max.	Unit
V_R	Breakdown Voltage	I_R = 10μA	30		V
V_F	Forward Voltage	I_F = 1mA		370	mV
I_R	Reverse Leakage	V_R = 30V		0.5	μA
trr	Reverse Recovery Time	I_F = I_R= 10mA, irr = 0.1I_R		8.0	nS
C_j	Junction Capacitance	V_R = 1V, f = 1.0MHz		2.5	pF

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Typical Performance Characteristics

Figure 1. Forward Current Characteristics

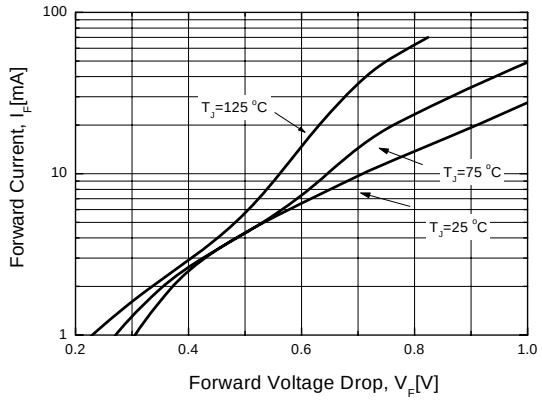


Figure 2. Reverse Leakage Current

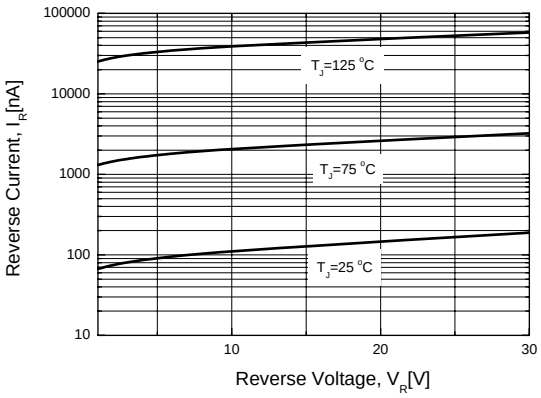


Figure 3. Junction Capacitance

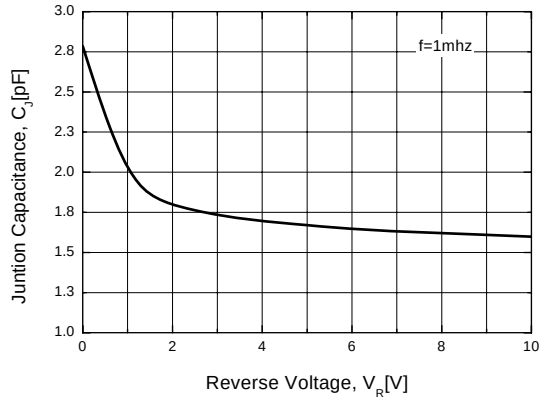
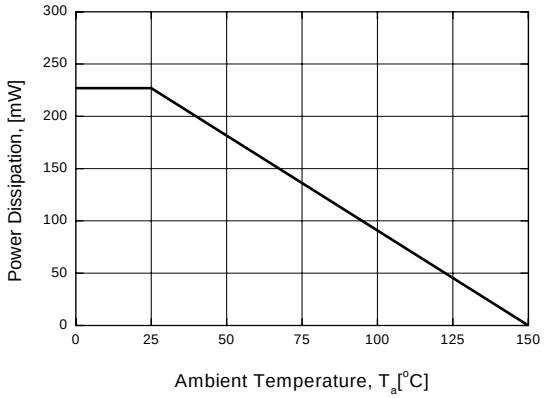


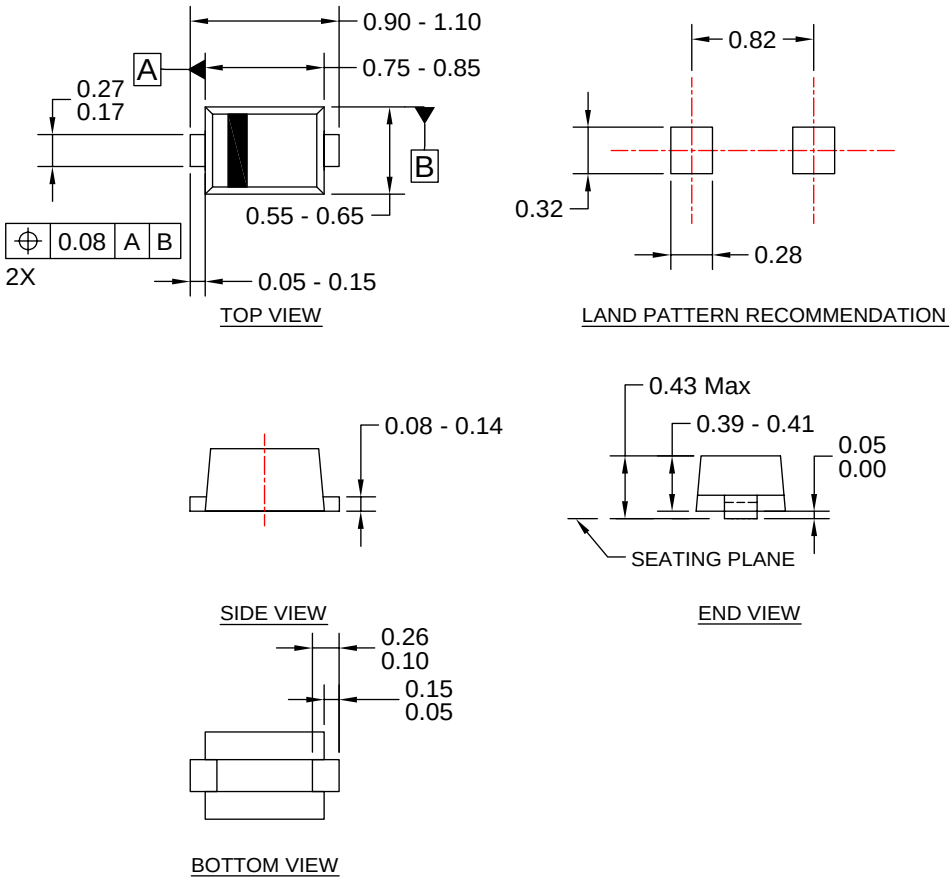
Figure 4. Power Derating



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Physical Dimensions

SOD-923F



NOTES:

A) THIS PACKAGE DOES NOT COMPLY TO ANY CURRENT PACKAGING STANDARD.
B) ALL DIMENSIONS ARE IN MILLIMETERS.
C) BODY DIMENSIONS ARE INCLUSIVE OF BURRS, AND MOLD FLASH.
D) DIMENSIONS AND TOLERANCES PER ASME Y14.5M, 1994
E) LANDPATTERN BASED ON NOMINAL PACKAGE DIMENSIONS.
F) DRAWING FILE NAME : SOD923F1REV2

Dimensions in Millimeters

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No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
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Rev. I50

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