



# WSR4001D1

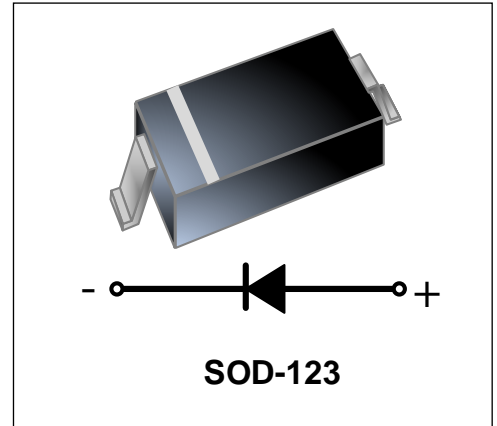
## Schottky Barrier Diode

### Features

- Low Forward Voltage Schottky Rectifier
- RoHS Compliant / Green EMC
- Matte Tin (Sn) Lead Finish
- Cathode Band / Device Marking

### Applications

- Fast Switching RF and Digital Applications
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications



### Absolute Maximum Rating

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	40	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	$I_O$	1	A
Non-Repetitive Peak Forward Surge Current @ $t=8.3ms$	$I_{FSM}$	9	A
Repetitive Peak Forward Current	$I_{FRM}$	1.5	A
Power Dissipation	$P_D$	500	mW
Junction Temperature	$T_j$	125	°C
Storage Temperature	$T_{stg}$	-65~+150	°C

### Electrical Characteristics ( $T_{amb}=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{BR}$	$I_R = 1mA$	40	-	-	V
Reverse Voltage Leakage Current	$I_R$	$V_R = 40V$	-	-	1	mA
Forward Voltage	$V_{F1}$	$I_F = 1A$	-	-	0.6	V
	$V_{F2}$	$I_F = 3A$	-	-	0.9	V
Diode Capacitance	$C_D$	$V_R = 4V, f = 1MHz$	-	-	120	pF

Typical Characteristics

Figure 1. Forward Characteristics

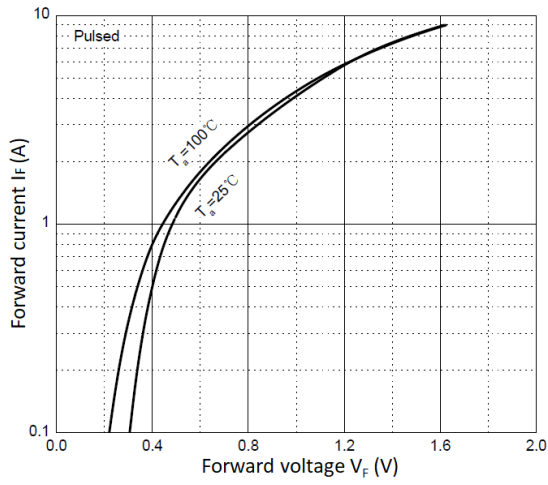


Figure 2. Reverse Characteristics

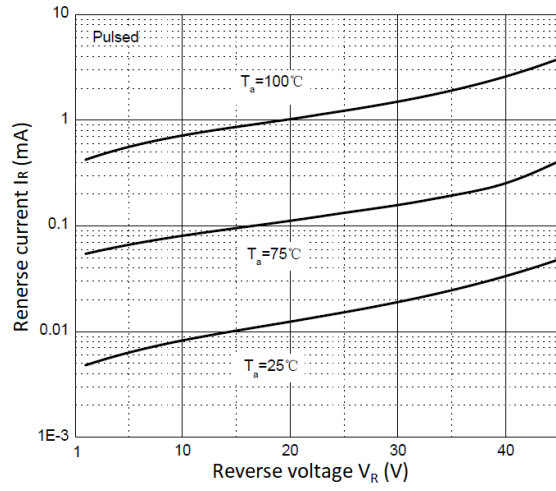


Figure 3. Capacitance Characteristics

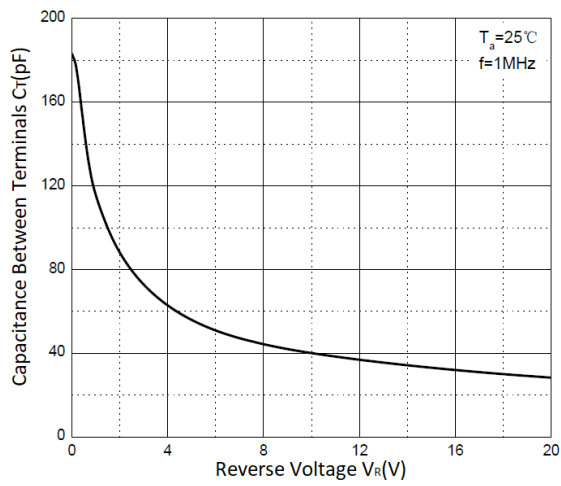
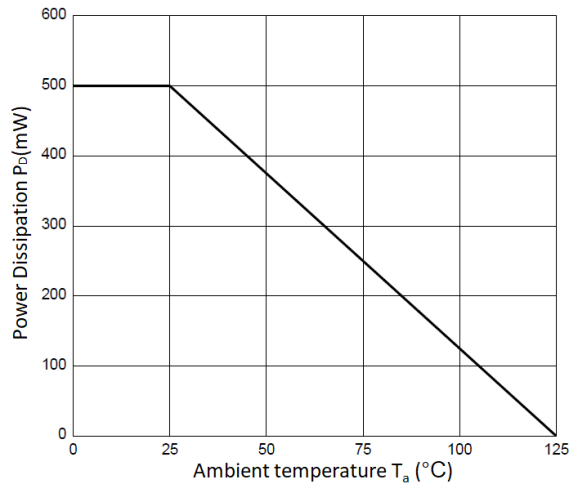
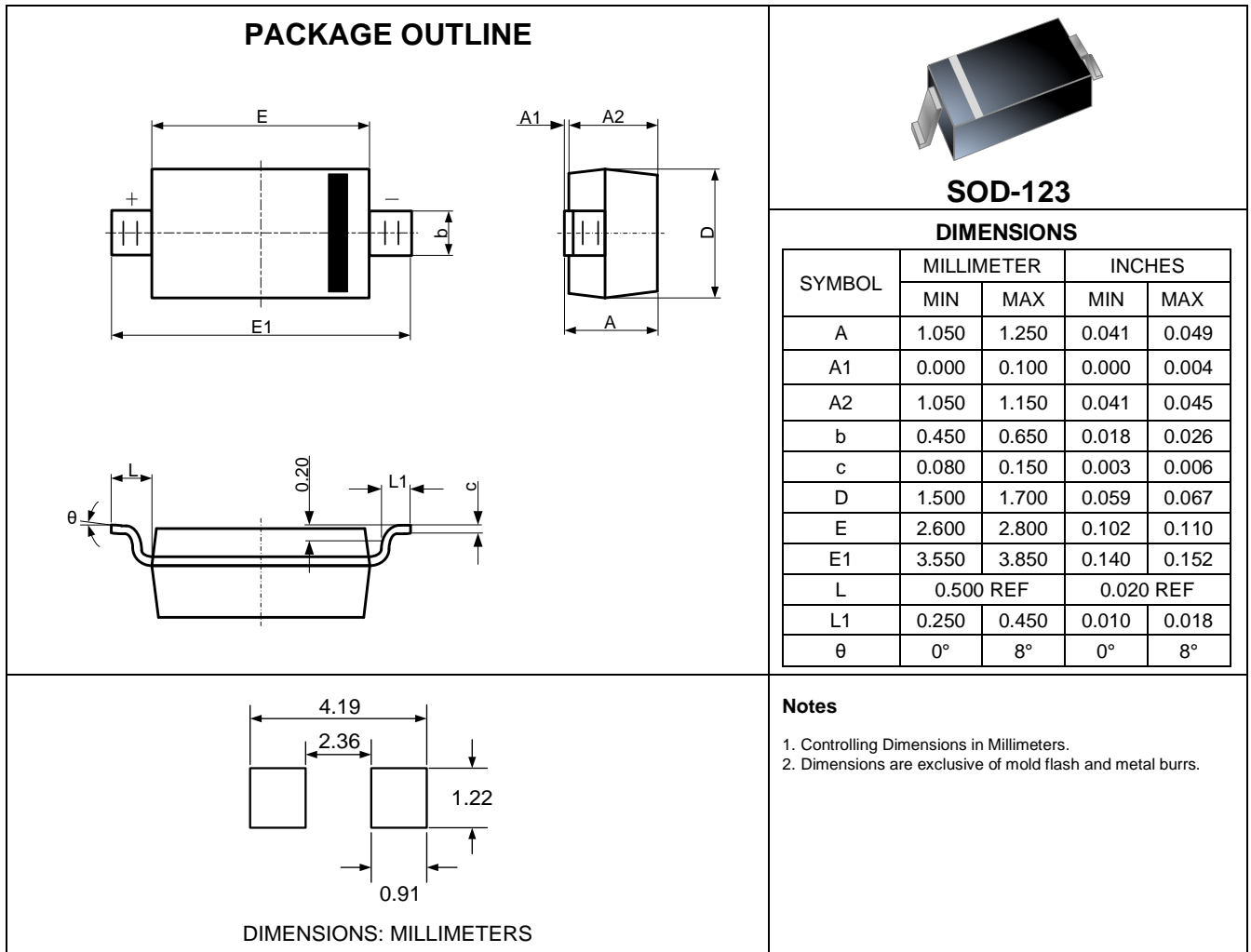


Figure 4. Power Derating Curve



## Outline Drawing –SOD-123



## Marking Codes

Part Number	WSR4001D1
Marking Code	

## Package Information

Qty: 3k/Reel

## CONTACT INFORMATION

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For additional information, please contact your local Sales Representative.

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Specifications are subject to change without notice.  
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.