

1.0Amp Surface mount fast recovery rectifiers

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junctions
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2011/65/EU and WEEE 2002/96/EC

SOD-323



1.Cathode
2.Anode

Mechanical Date

- **Case:** SOD-323
Molding compound meets
UL 94 V-0 flammability rating
- **Terminals:** Solder plated, solderable per
MIL-STD-750, Method 2026
- **Polarity:** Laser band denotes cathode end

Maximum Ratings & Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Item	Symbol	A1	A2	A3	A4	A5	A6	A7	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=115^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	10							A
Operating and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$
Thermal resistance from junction to lead ⁽¹⁾	$R_{\theta JL}$	35							$^\circ\text{C/W}$

Note1: Mounted on PCB with 0.2x0.2" (5.0mmx5.0mm) copper pad areas.

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

Item	Test conditions	Symbol	Min	Typ	Max	Unit
Instantaneous forward voltage	$I_F=0.5\text{A}$	V_F	-	0.95	-	V
	$I_F=1.0\text{A}$		-	1.0	1.15	
Reverse current	$V_R=V_{DC}$	I_R	-	-	5.0	μA
			-	-	50	

1.0Amp Surface mount fast recovery rectifiers

Fig.1 Forward Current Derating Curve

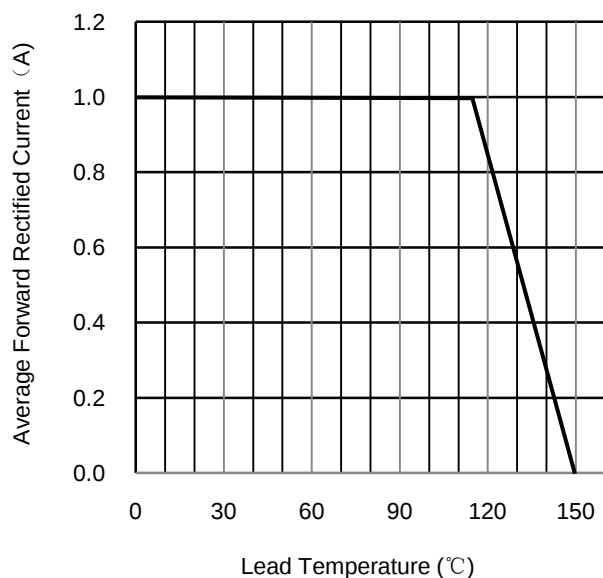


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

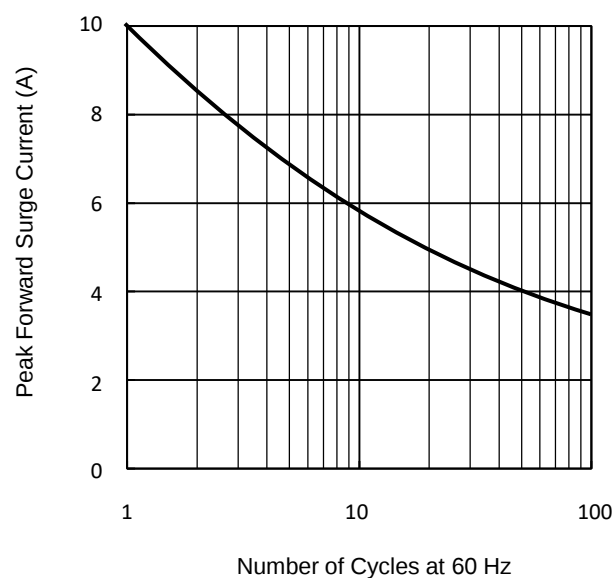


Fig.3 Typical Instantaneous Forward Characteristics

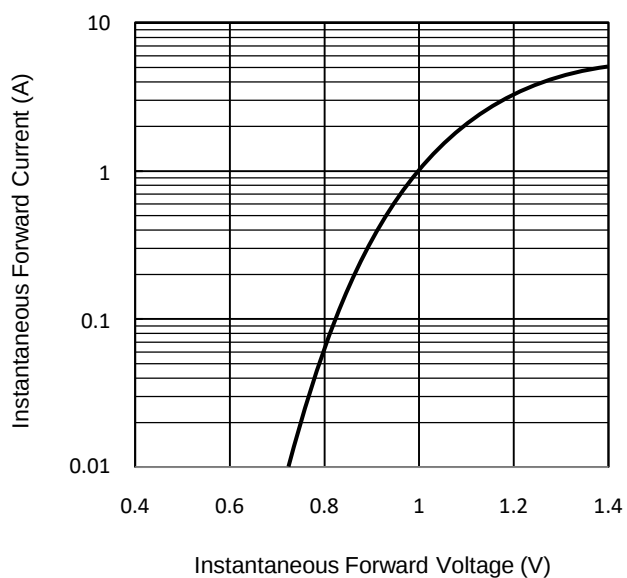
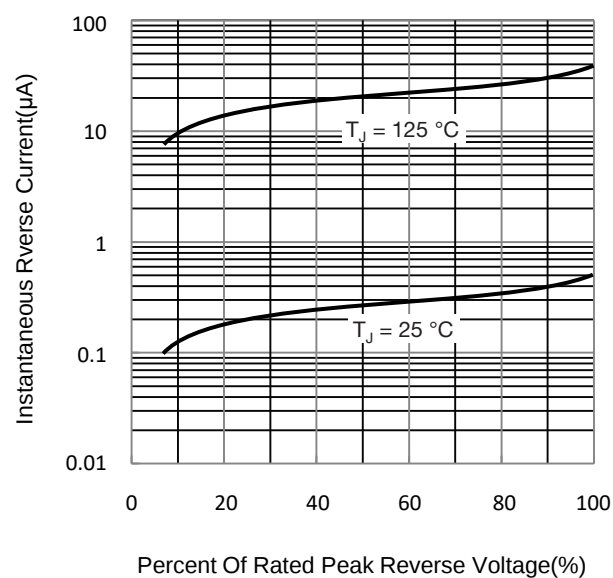


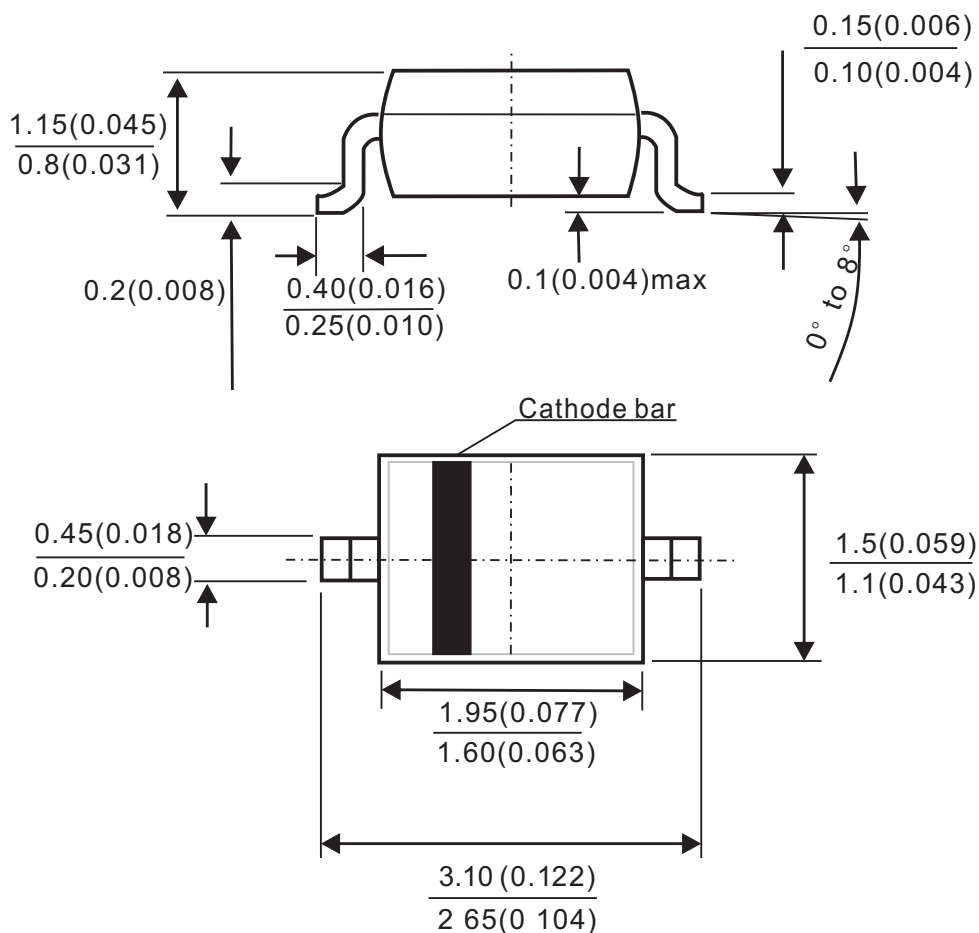
Fig.4 Typical Reverse Characteristics



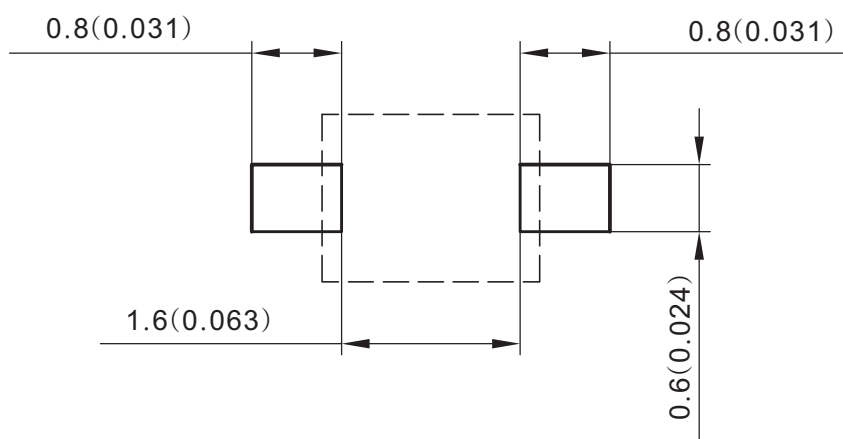
1.0Amp Surface mount fast recovery rectifiers

Package Dimension

SOD-323



Footprint recommendation:



Package dimensions in millimeters (inches)