

SS1060XFL-AU

Surface Mount Ultra Low V_F Schottky Barrier Rectifier

Voltage

60 V

Current

1 A

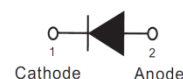
Features

- Low forward voltage drop
- Ideal for automated placement
- Low power loss, high efficiency
- High surge current capability
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-123FL Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0173 grams

SOD-123FL



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

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	60	V
Maximum RMS Voltage		V_{RMS}	42	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Current		$I_{F(AV)}$	1	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load		I_{FSM}	40	A
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$		C_J	80	pF
Typical Thermal Resistance	(Note 1)	$R_{\theta JA}$	200	$^{\circ}\text{C/W}$
	(Note 2)	$R_{\theta JC}$	32	
Operating Junction Temperature Range		T_J	-55~150	$^{\circ}\text{C}$
Storage Temperature Range		T_{STG}	-55~150	$^{\circ}\text{C}$

SS1060XFL-AU

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 0.5\text{ A}, T_J = 25^\circ\text{C}$	-	0.43	-	V
		$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.54	
		$I_F = 0.5\text{ A}, T_J = 125^\circ\text{C}$	-	0.36	-	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.45	-	
Reverse Current ^(Note 3)	I_R	$V_R = 48\text{ V}, T_J = 25^\circ\text{C}$	-	5.5	-	μA
		$V_R = 60\text{ V}, T_J = 25^\circ\text{C}$	-	-	30	
		$V_R = 60\text{ V}, T_J = 125^\circ\text{C}$	-	4.3	-	mA

NOTES :

1. Mounted with minimum recommended pad size, PC Board FR4
2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.
3. Short duration pulse test used to minimize self-heating effect.

SS1060XFL-AU

TYPICAL CHARACTERISTIC CURVES

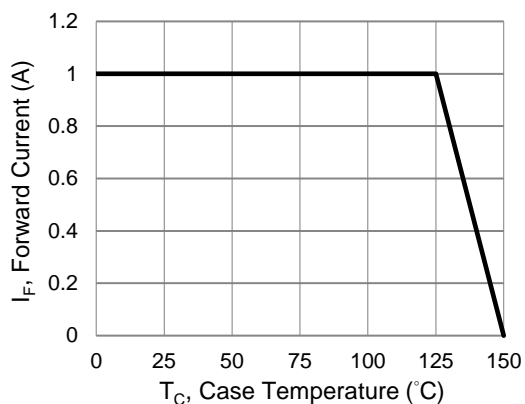


Fig.1 Forward Current Derating Curve

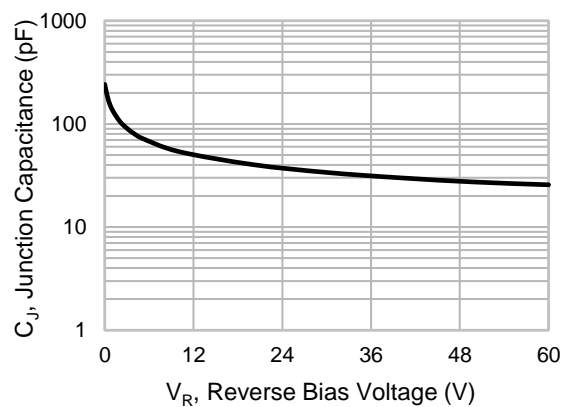


Fig.2 Typical Junction Capacitance

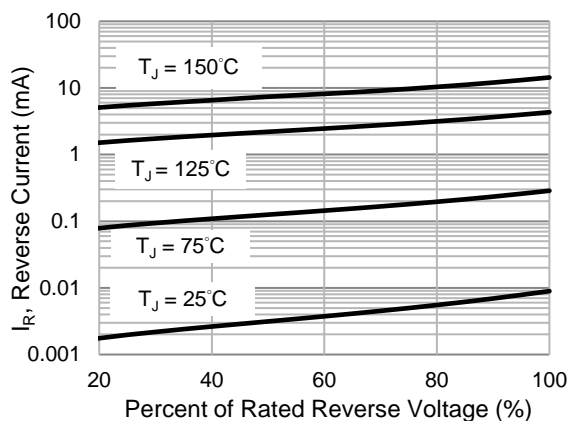


Fig.3 Typical Reverse Characteristics

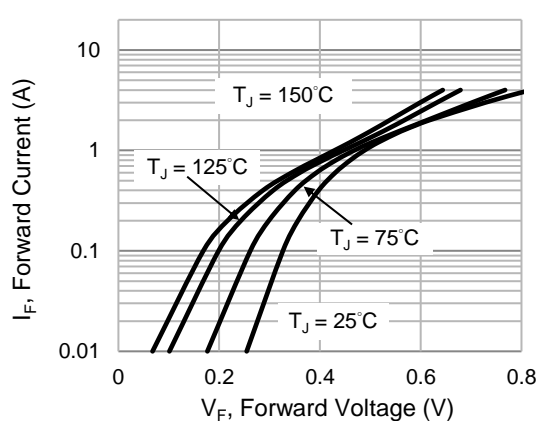


Fig.4 Typical Forward Characteristics

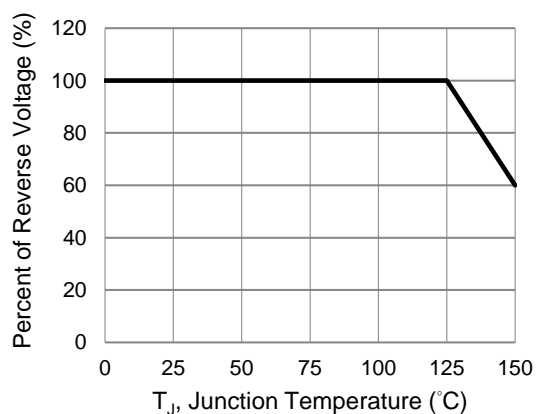


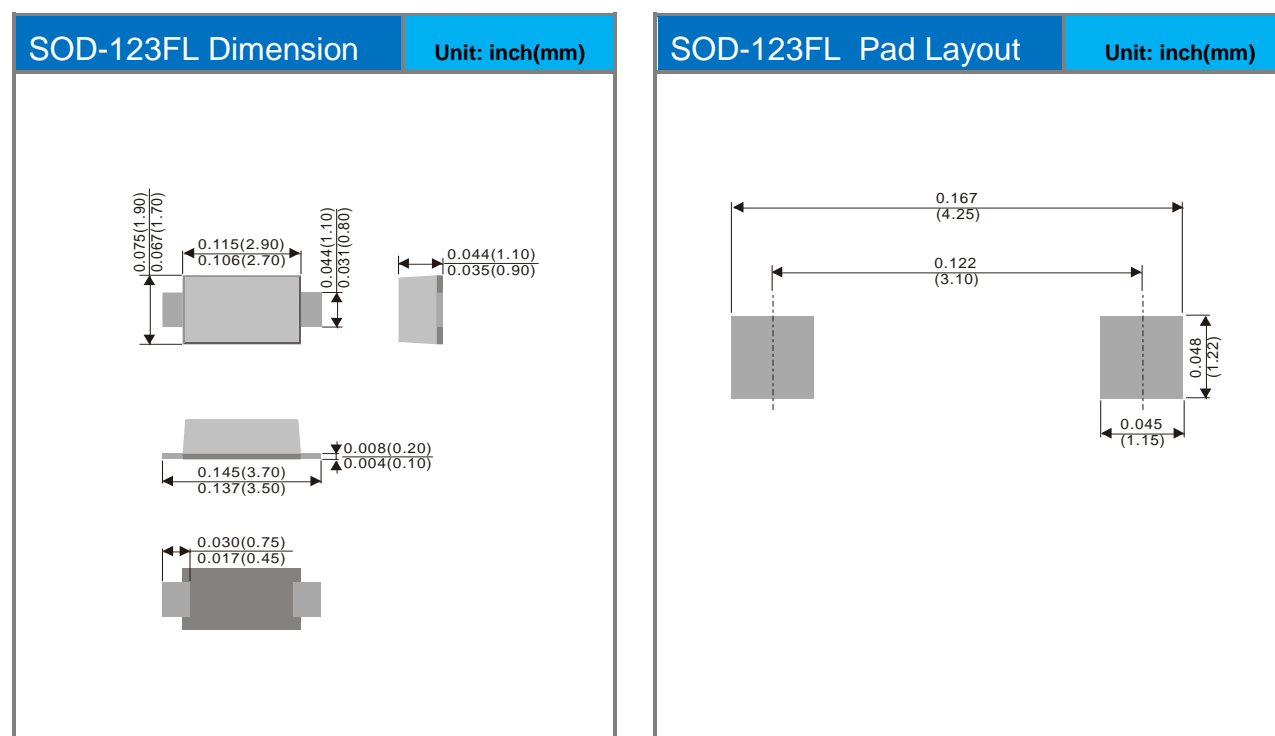
Fig.5 Operating Temperature Derating Curve

SS1060XFL-AU

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SS1060XFL-AU	SOD-123FL	3K / 7" Reel	6X

Packaging Information & Mounting Pad Layout



SS1060XFL-AU

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document follow PCN procedure. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.