

SS1060XFL

EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER

Voltage

60 V

Current

1 A

SOD-123FL

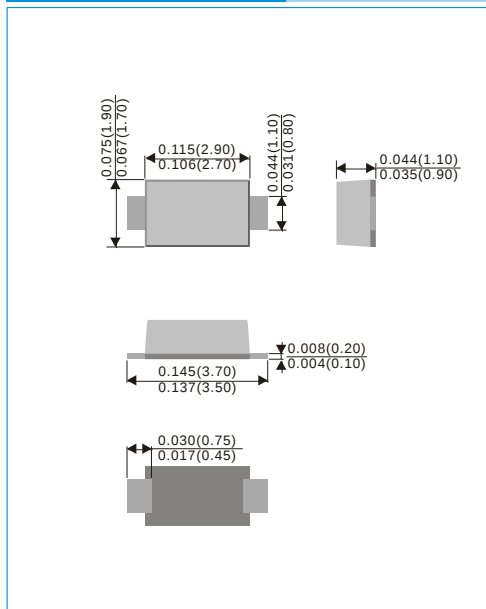
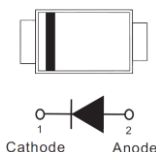
Unit : inch(mm)

Features

- Ideal for automated placement
- Extreme low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: SOD-123FL Molded Plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.0006 ounces, 0.0173 grams



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

PARAMETER		SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	60	V
Maximum rms voltage		V_{RMS}	42	V
Maximum dc blocking voltage		V_R	60	V
Maximum average forward rectified current		$I_{F(AV)}$	1	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	40	A
Typical thermal resistance	(Note 1)	$R_{\theta JA}$	200	$^{\circ}\text{C}/\text{W}$
	(Note 2)	$R_{\theta JC}$	32	
Operating junction temperature range		T_J	-55 to +150	$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-55 to +150	$^{\circ}\text{C}$

Note : 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area

SS1060XFL

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

PARAMETER	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNITS
Breakdown voltage	V_{BR}	$I_R=0.5\text{mA}$	$T_J=25^\circ\text{C}$	60	-	-	V
Instantaneous forward voltage	V_F	$I_F=0.5\text{A}$	$T_J=25^\circ\text{C}$	-	0.42	-	V
		$I_F=1\text{A}$	$T_J=25^\circ\text{C}$	-	0.49	0.54	V
		$I_F=0.5\text{A}$	$T_J=125^\circ\text{C}$	-	0.33	-	V
		$I_F=1\text{A}$	$T_J=125^\circ\text{C}$	-	0.45	-	V
Reverse current	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	μA
		$V_R=60\text{V}$	$T_J=125^\circ\text{C}$	-	4.5	-	μA
		$V_R=60\text{V}$	$T_J=125^\circ\text{C}$	-	-	-	mA

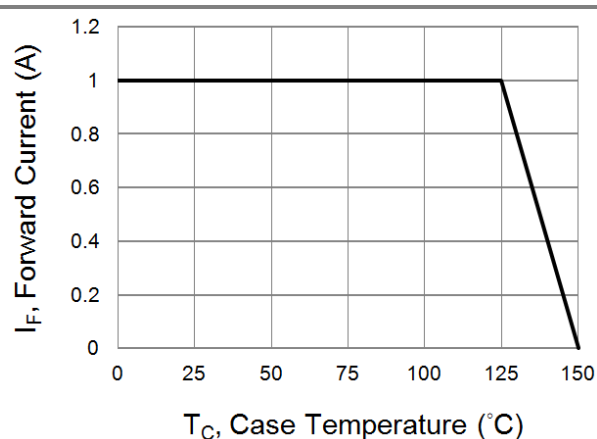


Fig.1 Forward Current Derating Curve

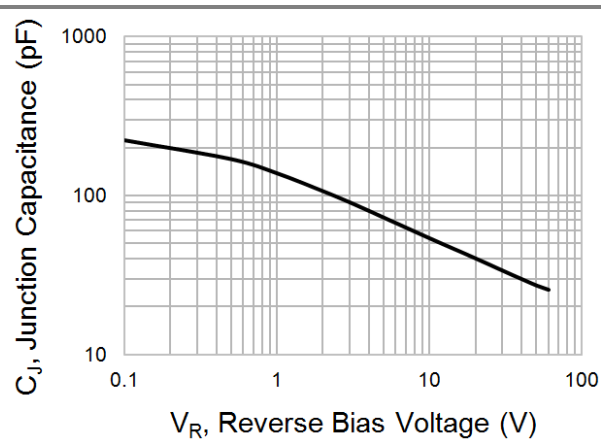


Fig.2 Typical Junction Capacitance

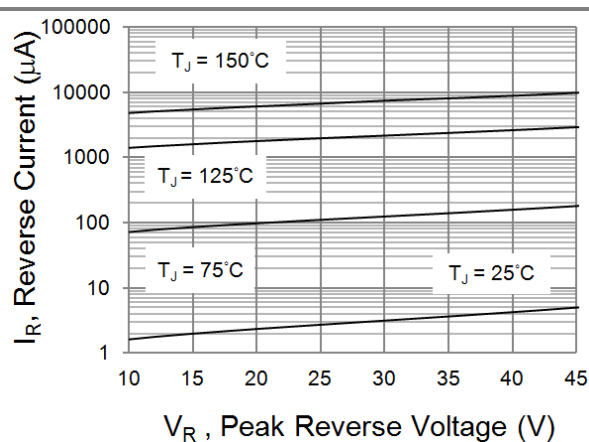


Fig.3 Typical Reverse Characteristics

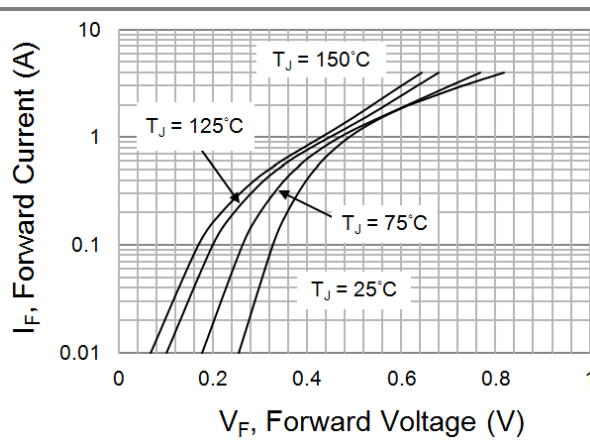
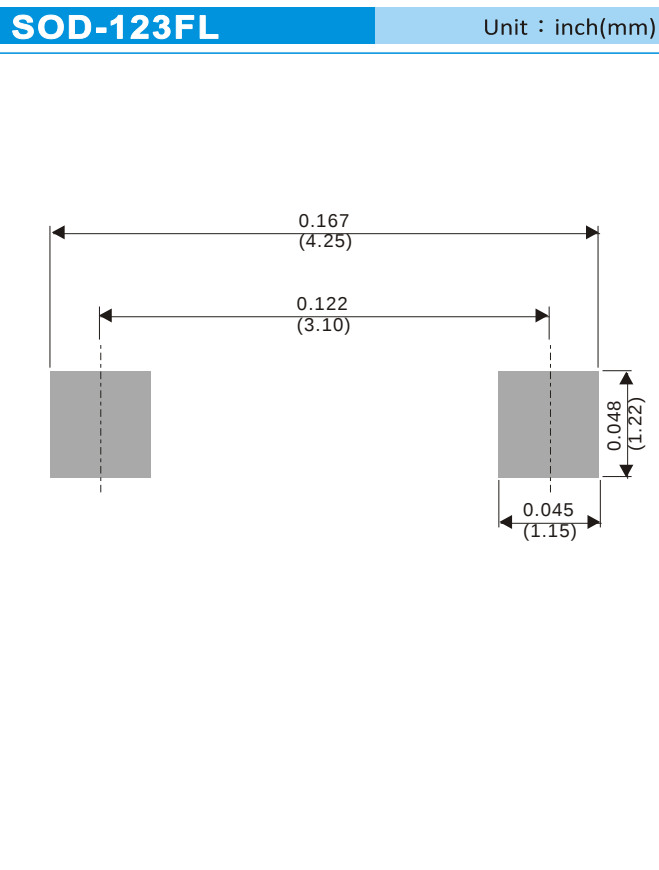


Fig.4 Typical Forward Characteristics

SS1060XFL

MOUNTING PAD LAYOUT



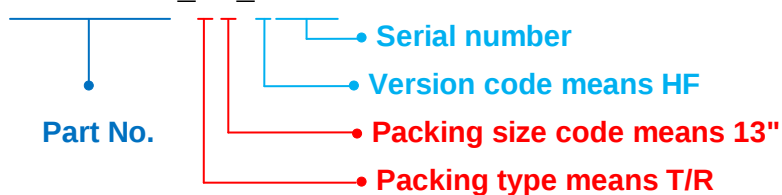
SS1060XFL

PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
SS1060XFL_R1_00001	SOD-123FL	3K pcs / 7" reel	6X	Halogen free
SS1060XFL_R2_00001	SOD-123FL	10K pcs / 13" reel	6X	Halogen free

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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