

SS1060XFL

EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER

Voltage

60 V

Current

1 A

SOD-123FL

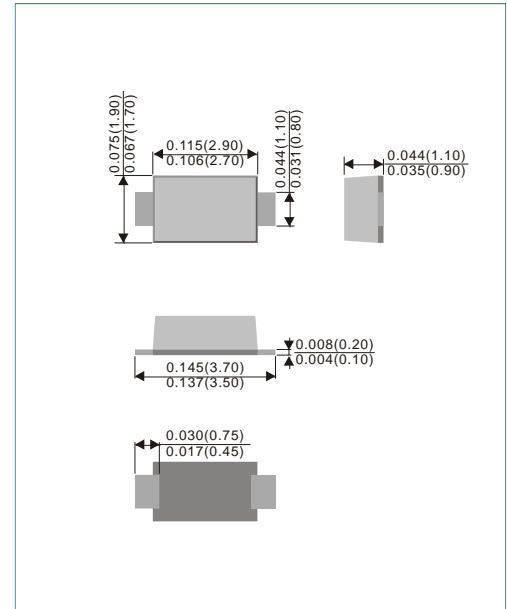
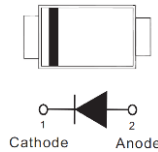
Unit : inch(mm)

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°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 _{θJA}	200	°C/W
	(Note 2)	R _{θJC}	32	
Operating junction temperature range		T _J	-55 to +150	°C
Storage temperature range		T _{STG}	-55 to +150	°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

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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	-	mA

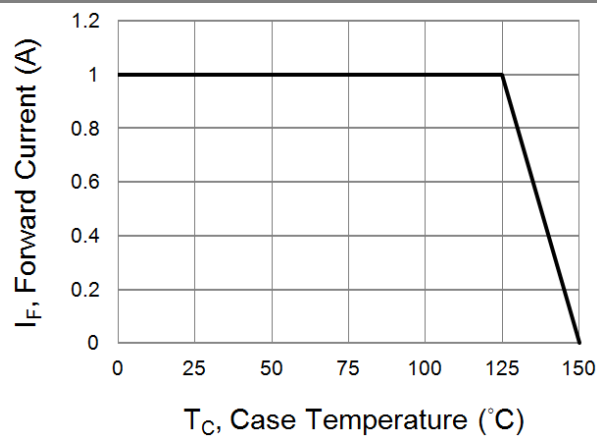


Fig.1 Forward Current Derating Curve

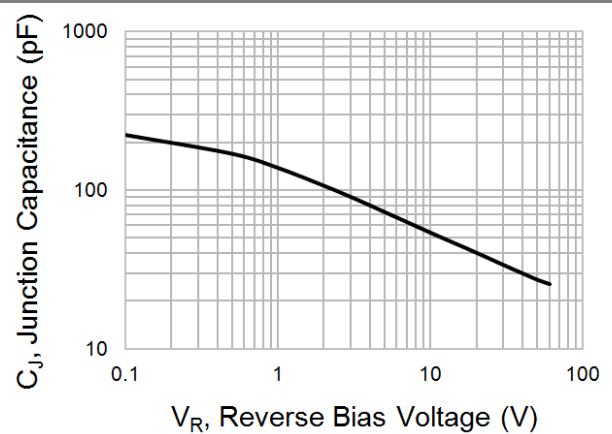


Fig.2 Typical Junction Capacitance

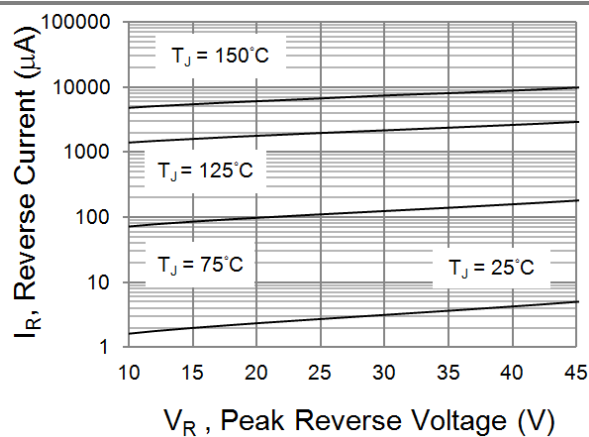


Fig.3 Typical Reverse Characteristics

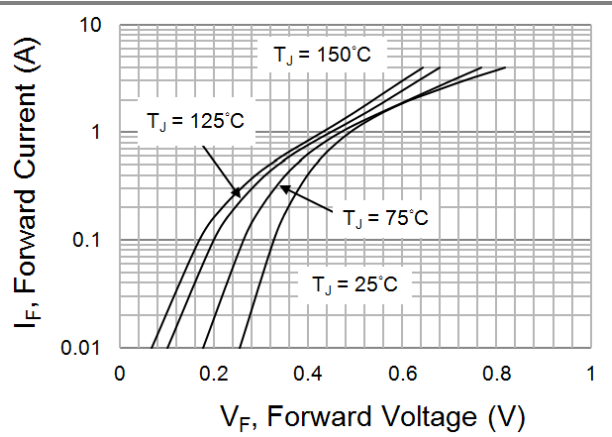
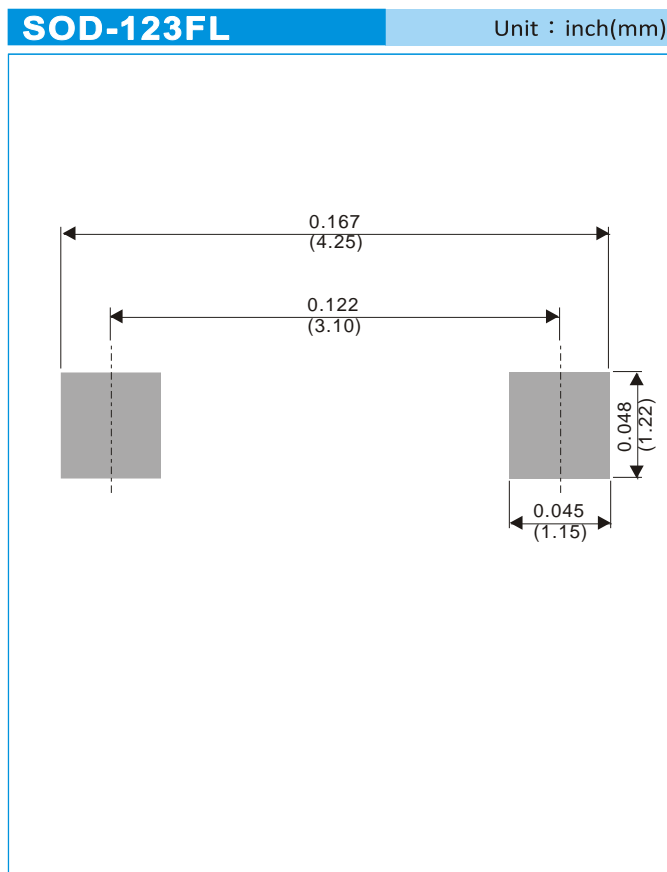


Fig.4 Typical Forward Characteristics

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MOUNTING PAD LAYOUT



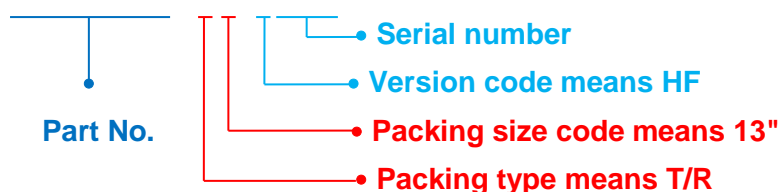
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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SS1060XFL	SOD-123FL	3K pcs / 7" reel	6X
SS1060XFL	SOD-123FL	10K pcs / 13" reel	6X

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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