



SVT1080XB

EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER

Voltage

80 V

Current

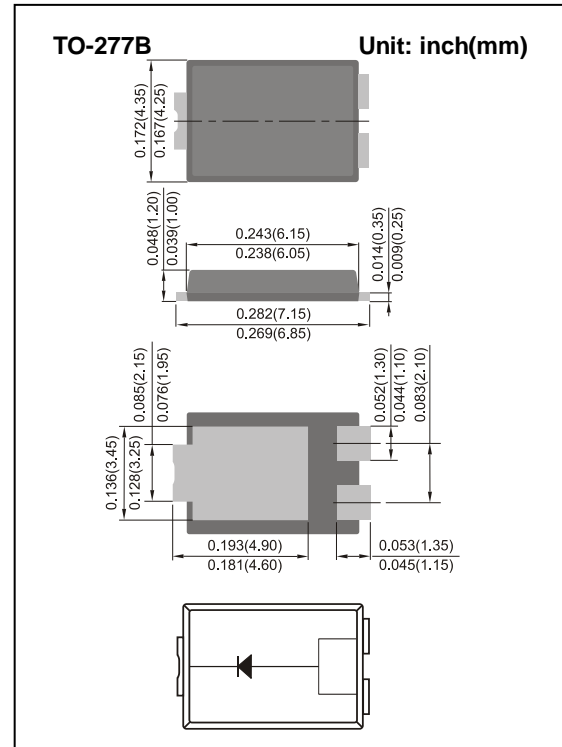
10 A

Features

- Ideal for automated placement
- Extreme low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Easy pick and place package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

Mechanical Data

- Case: TO-277B package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.0038 ounces, 0.1088 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}	80	V
Maximum rms voltage	V_{RMS}	56	V
Maximum dc blocking voltage	V_R	80	V
Maximum average forward rectified current	$I_{F(AV)}$	10	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Typical thermal resistance	(Note 1) $R_{\theta JA}$	110	$^\circ\text{C/W}$
	(Note 2) $R_{\theta JC}$	3	
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 10cm*10cm*0.5mm 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}	$I_R=0.5\text{mA}$	$T_J=25^{\circ}\text{C}$	80	-	-	V
Instantaneous forward voltage	V_F	$I_F=1\text{A}$	$T_J=25^{\circ}\text{C}$	-	0.38	-	V
		$I_F=3\text{A}$		-	0.44	-	
		$I_F=10\text{A}$		-	-	0.63	
		$I_F=1\text{A}$	$T_J=125^{\circ}\text{C}$	-	0.26	-	V
$I_F=3\text{A}$	-	0.36		-			
Reverse current	I_R	$V_R=64\text{V}$	$T_J=25^{\circ}\text{C}$	-	6	-	μA
		$V_R=80\text{V}$	$T_J=25^{\circ}\text{C}$	-	-	40	μA
			$T_J=125^{\circ}\text{C}$	-	7	-	mA



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TYPICAL CHARACTERISTIC CURVES

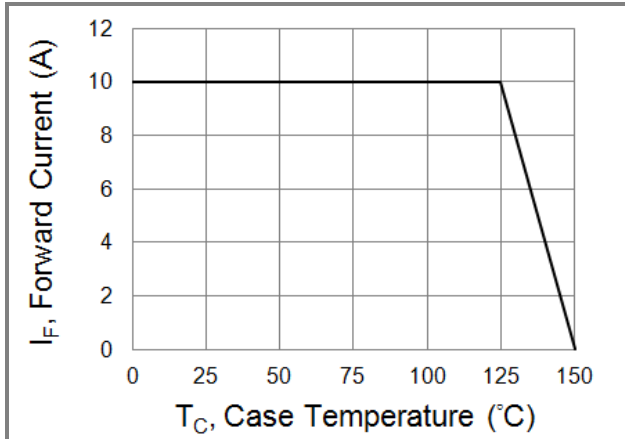


Fig.1 Forward Current Derating Curve

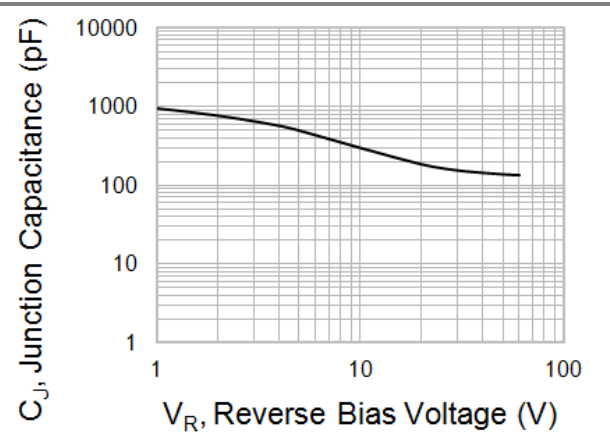


Fig.2 Typical Junction Capacitance

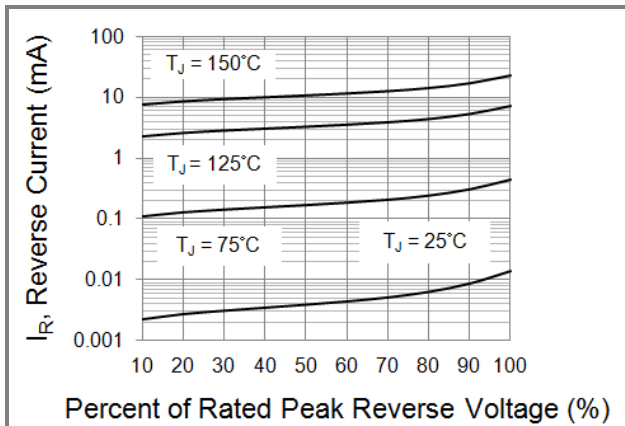


Fig.3 Typical Reverse Characteristics

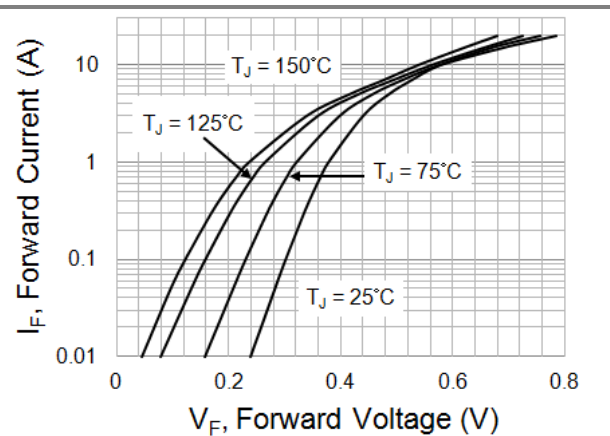


Fig.4 Typical Forward Characteristics

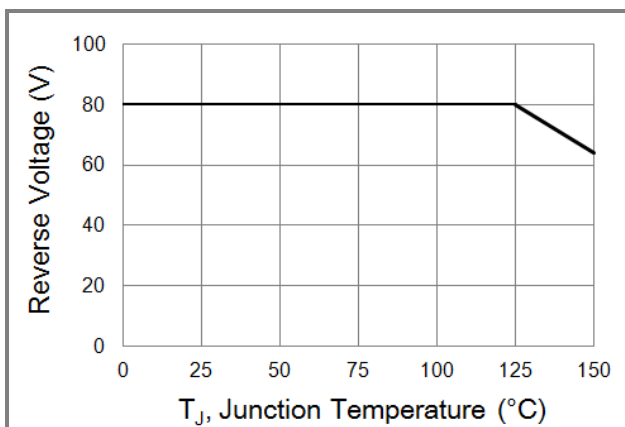


Fig.5 Operating Temperature Derating Curve



SVT1080XB

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SVT1080XB_R2_00001	TO-277B	5K pcs / 13" reel	SVT1080XB	Halogen free



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