

# SVT15150VB

## ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

**Voltage**

**150 V**

**Current**

**15 A**

**TO-277B**

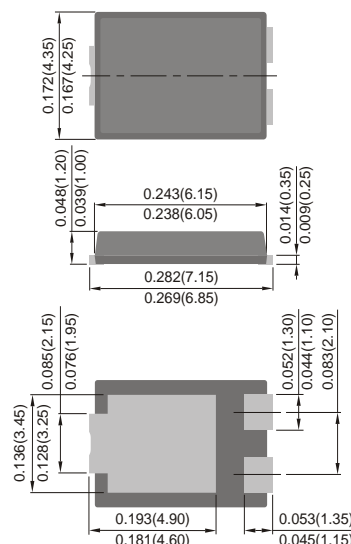
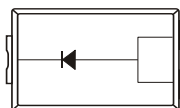
Unit : inch(mm)

### Features

- Ideal for automated placement
- Ultra 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.
- Marking: Part number



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

PARAMETER		SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage		$V_{RRM}$	150	V
Maximum rms voltage		$V_{RMS}$	105	V
Maximum dc blocking voltage		$V_R$	150	V
Maximum average forward rectified current		$I_{F(AV)}$	15	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		$I_{FSM}$	250	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\*1mm copper pad area

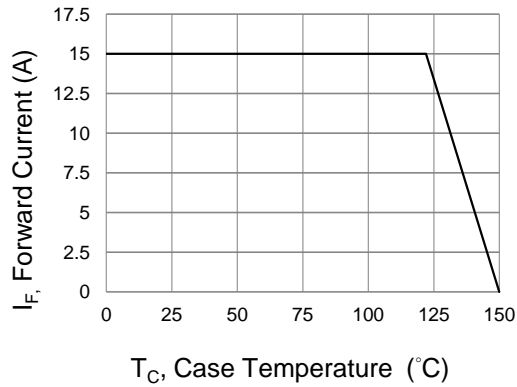


## SVT15150VB

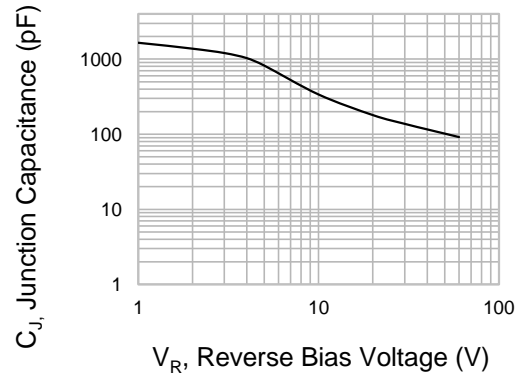
Electrical Characteristics ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNITS
Breakdown voltage	$V_{BR}$	$I_R=0.5\text{mA}$	$T_J=25^{\circ}\text{C}$	150	-	-	V
Instantaneous forward voltage	$V_F$	$I_F=1\text{A}$	$T_J=25^{\circ}\text{C}$	-	0.45	-	V
		$I_F=5\text{A}$		-	0.65	-	
		$I_F=15\text{A}$		-	0.80	0.85	
		$I_F=1\text{A}$	$T_J=125^{\circ}\text{C}$	-	0.36	-	V
		$I_F=5\text{A}$		-	0.53	-	
Reverse current	$I_R$	$V_R=120\text{V}$	$T_J=25^{\circ}\text{C}$	-	5	-	$\mu\text{A}$
		$V_R=150\text{V}$	$T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$	- -	- 7	30 -	$\mu\text{A}$ mA

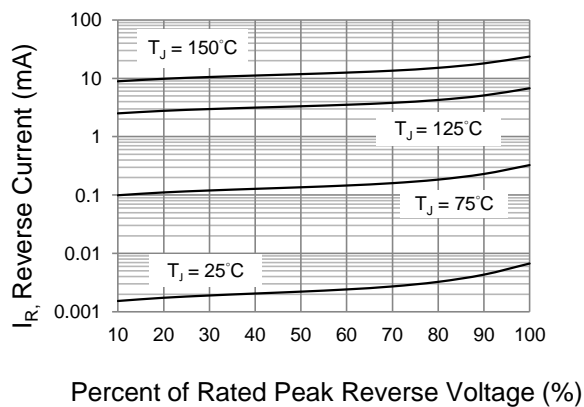
# SVT15150VB



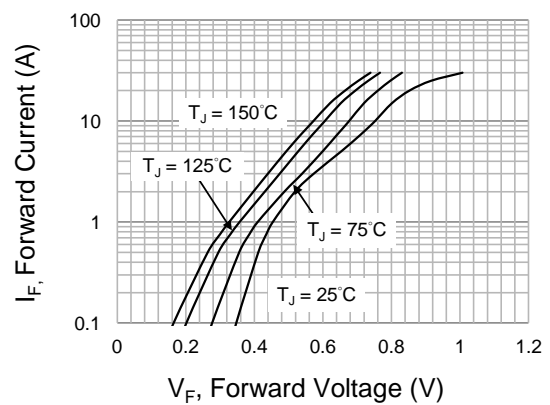
**Fig.1 Forward Current Derating Curve**



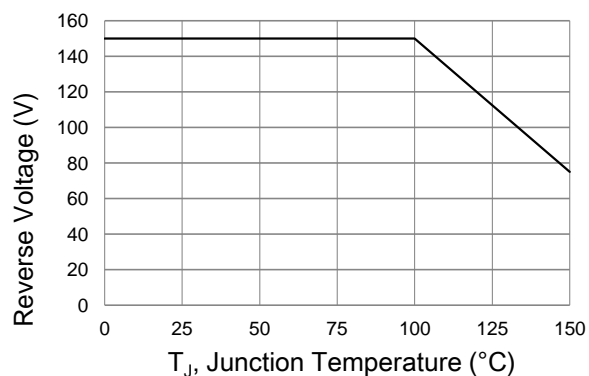
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



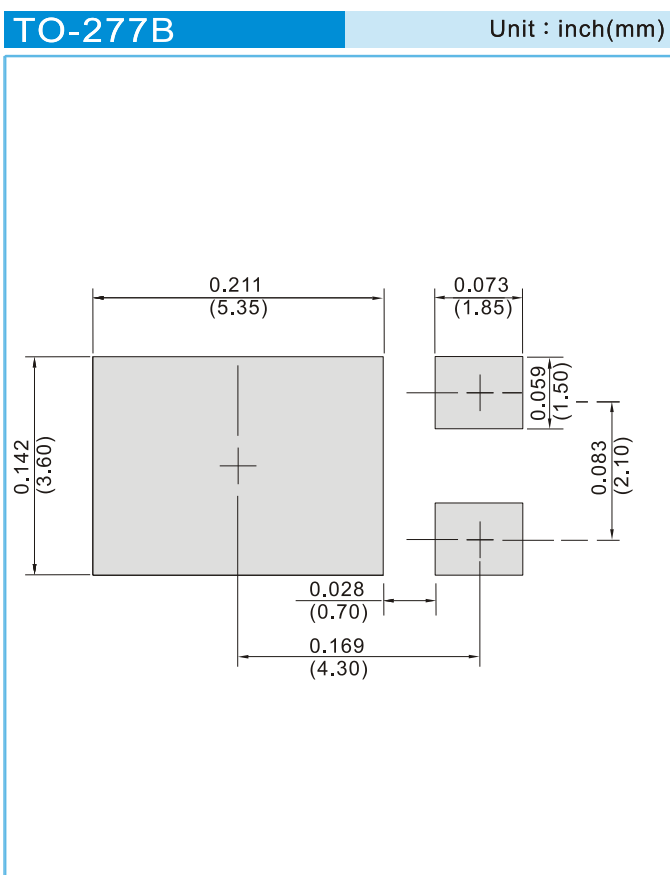
**Fig.4 Typical Forward Characteristics**



**Fig.5 Operating Temperature Derating Curve**

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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information  
T/R – 5K per 13" plastic Reel



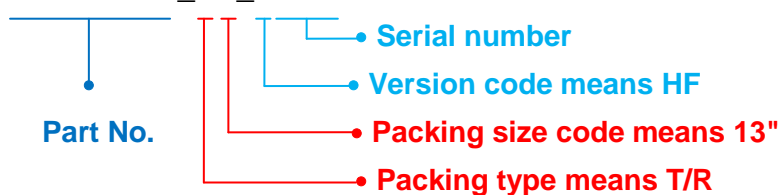
## SVT15150VB

Part No\_packing code\_Version

SVT15150VB\_R2\_00001

For example :

RB500V-40\_R2\_00001



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



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