

# SVM1550U

## LOW VF SCHOTTKY RECTIFIER

**VOLTAGE** 50 Volt **CURRENT** 15 Ampere

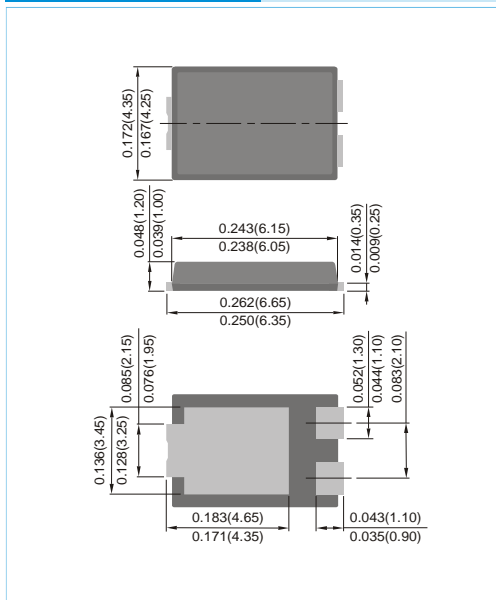
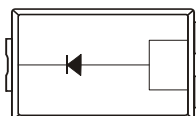
**TO-277** Unit : inch(mm)

### FEATURES

- Ideal for automated placement
- Low forward voltage drop, low power losses
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- 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-277, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.0037 ounces, 0.1073 grams
- Marking : SVM1550U



### MAXIMUM RATINGS( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	V
Maximum RMS Voltage	$V_{RMS}$	35	V
Maximum DC Blocking Voltage	$V_R$	50	V
Maximum Average Rectified Output Current	$I_{F(AV)}$	15	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	275	A
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	6	$^{\circ}\text{C/W}$
(Note 2)	$R_{\theta JA}$	110	
Operating Junction Temperature Range And Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150	$^{\circ}\text{C}$

### NOTES :

- 1.Mounted on an FR4 PCB, single-sided copper, with 10cm\*10cm\*0.5mm copper pad area
- 2.Mounted on an FR4 PCB, single-sided copper, mini pad.

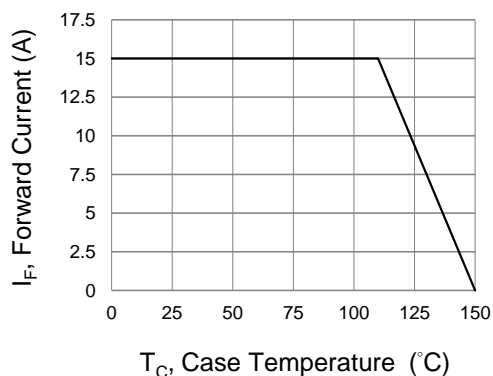


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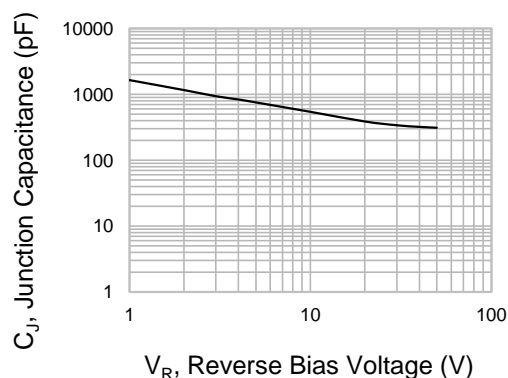
## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V <sub>BR</sub>	I <sub>R</sub> =0.5mA T <sub>A</sub> =25°C	50	-	-	V
Instantaneous forward voltage	V <sub>F</sub>	I <sub>F</sub> =1A T <sub>A</sub> =25°C	-	0.28	-	V
		I <sub>F</sub> =2A T <sub>A</sub> =25°C	-	0.31	-	
		I <sub>F</sub> =15A T <sub>A</sub> =25°C	-	0.44	0.49	
		I <sub>F</sub> =1A T <sub>A</sub> =125°C	-	0.18	-	V
Reverse current	I <sub>R</sub>	I <sub>F</sub> =2A T <sub>A</sub> =125°C	-	0.21	-	
		I <sub>F</sub> =15A T <sub>A</sub> =125°C	-	0.4	-	
		V <sub>R</sub> =40V T <sub>A</sub> =25°C	-	65	-	μA
		V <sub>R</sub> =40V T <sub>A</sub> =125°C	-	15	-	mA
		V <sub>R</sub> =50V T <sub>A</sub> =25°C	-	-	320	μA
		V <sub>R</sub> =50V T <sub>A</sub> =125°C	-	20	-	mA

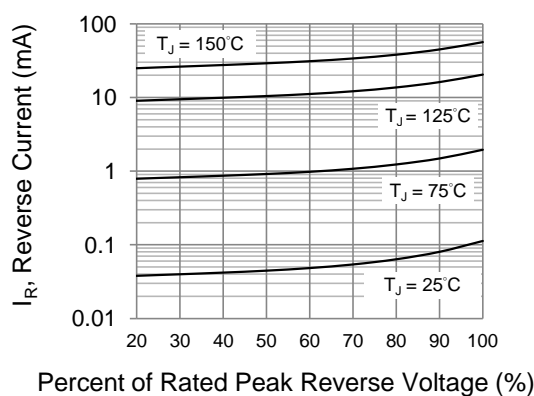
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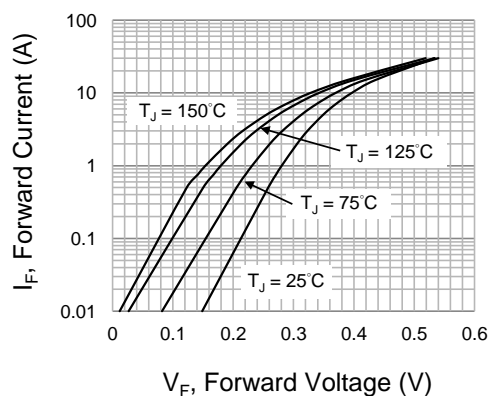
**Fig.1 Forward Current Derating Curve**



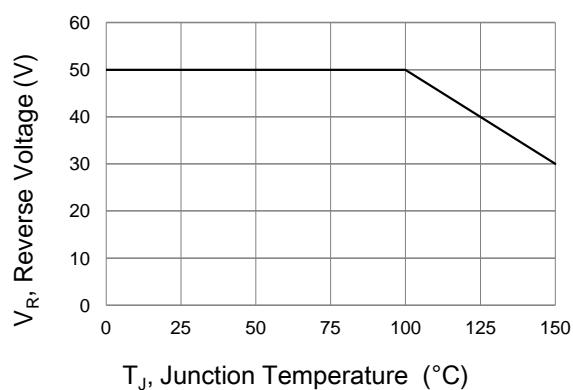
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



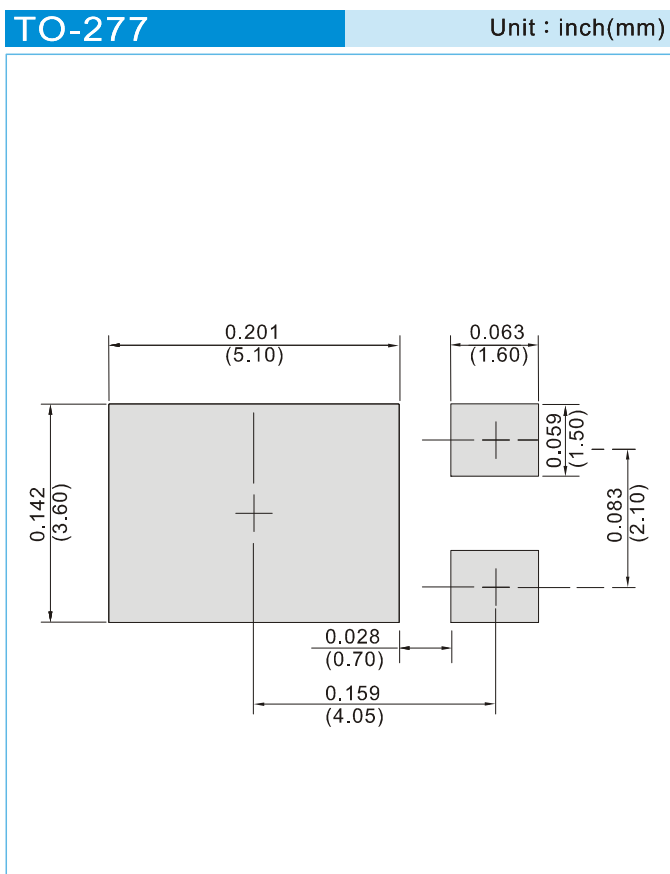
**Fig.4 Typical Forward Characteristics**



**Fig.5 Operating Temperature Derating Curve**

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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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



# SVM1550U

Part No\_packing code\_Version

SVM1550U\_R2\_00001

For example :

RB500V-40\_R2\_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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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