



# SVM1060XB

## LOW VF SCHOTTKY RECTIFIER

**VOLTAGE** 60 Volt **CURRENT** 10 Ampere

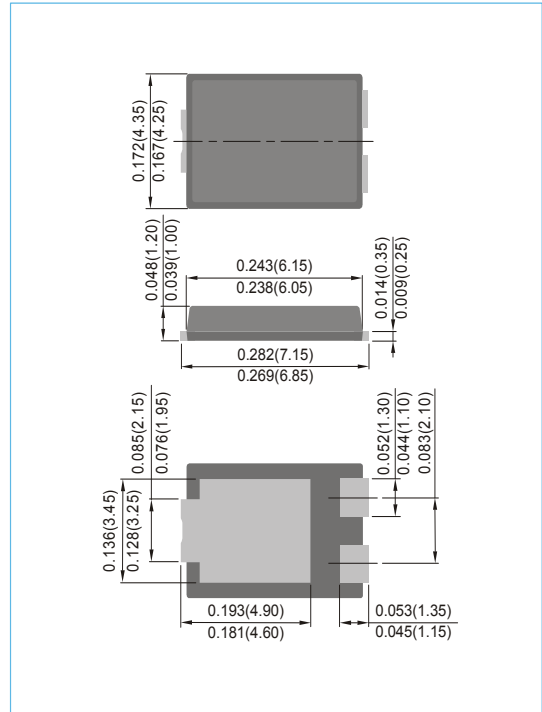
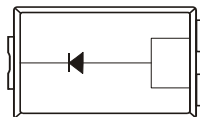
**TO-277B** Unit : inch(mm)

### FEATURES

- Ideal for automated placement
- Extreme 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 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case : TO-277B, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.0038 ounces, 0.1088 grams
- Marking : SVM1060XB



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	42	V
Maximum DC Blocking Voltage	V <sub>R</sub>	60	V
Maximum Average Rectified Output Current	I <sub>F(AV)</sub>	10	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	275	A
Typical Junction Capacitance V <sub>R</sub> =4V, 1MHz	C <sub>J</sub>	850	pF
Typical Thermal Resistance ,Junction to Ambient Junction to Case	R <sub>θJA</sub> R <sub>θJC</sub>	110 10	°C/W
Operating junction temperature range and Storage temperature range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to + 150	°C

NOTES :

1. Mounted on an FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.
2. Mounted on an FR4 PCB, single-sided copper, mini pad.



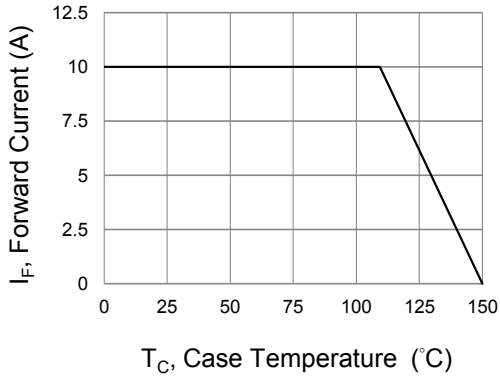
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## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

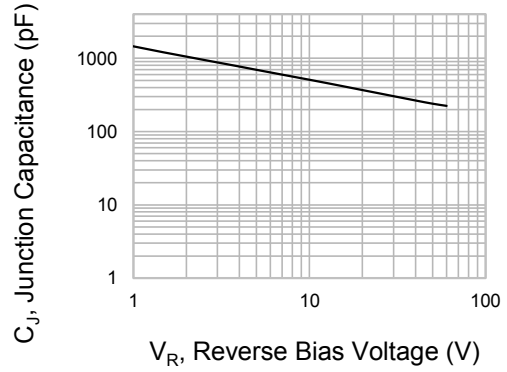
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V <sub>BR</sub>	I <sub>R</sub> =0.5mA      T <sub>A</sub> =25°C	60	-	-	V
Instantaneous forward voltage	V <sub>F</sub>	I <sub>F</sub> =1A	-	0.29	-	V
		I <sub>F</sub> =5A	-	0.38	-	
		I <sub>F</sub> =10A	-	0.44	0.49	
		I <sub>F</sub> =1A	-	0.19	-	V
I <sub>F</sub> =5A	T <sub>A</sub> =125°C	-	0.31	-		
I <sub>F</sub> =10A	T <sub>A</sub> =125°C	-	0.42	-		
Reverse current	I <sub>R</sub>	V <sub>R</sub> =42V      T <sub>A</sub> =25°C	-	40	-	μA
		V <sub>R</sub> =60V	T <sub>A</sub> =25°C	-	-	360
				20	-	mA



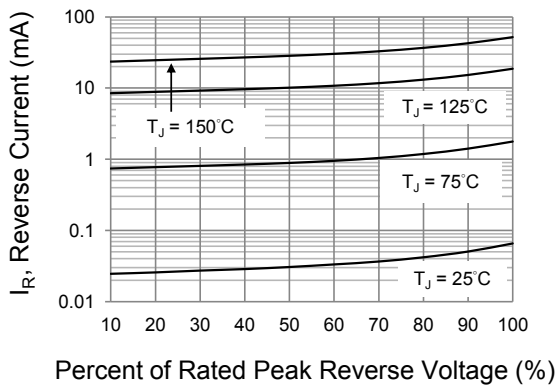
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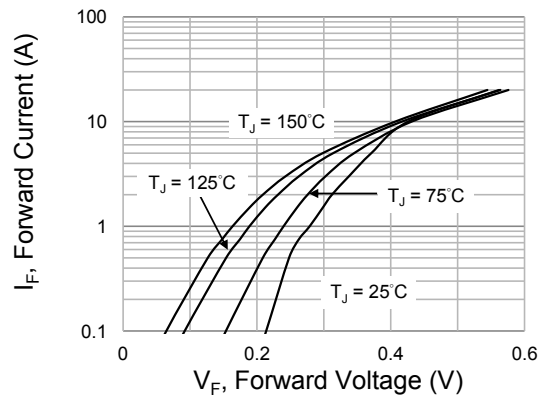
**Fig.1 Forward Current Derating Curve**



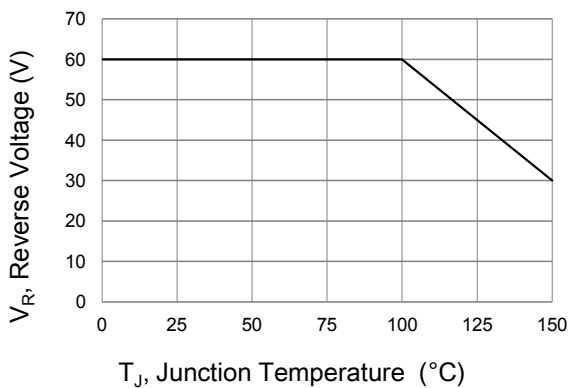
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

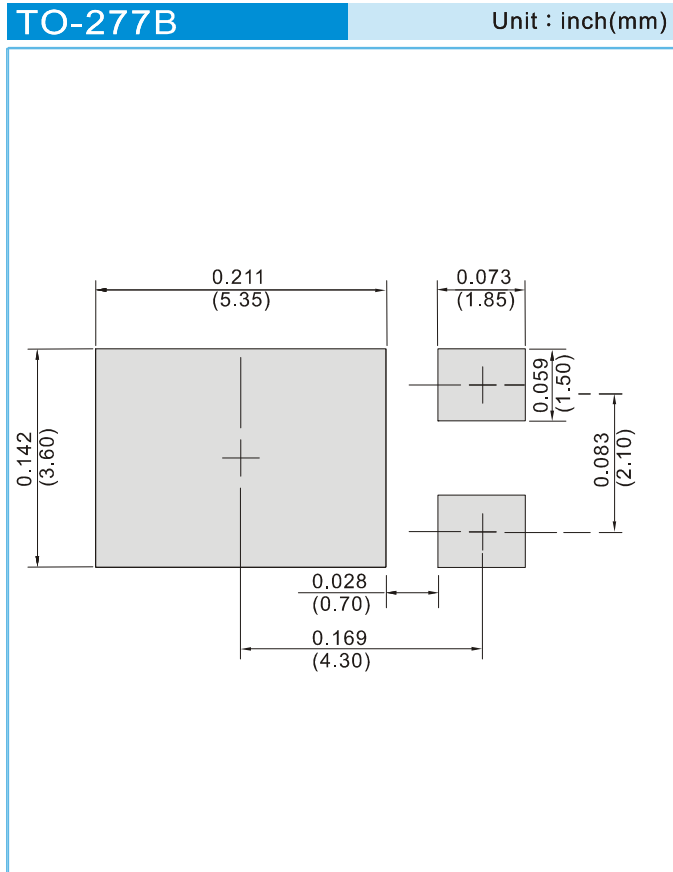


**Fig.5 Operating Temperature Derating Curve**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

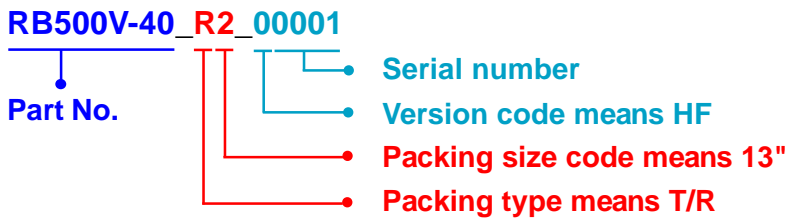
- Packing information  
T/R - 5K per 13" plastic Reel



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**Part No\_packing code\_Version**  
SVM1060XB\_R2\_00001

**For example :**



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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