

# SVM1060XB

## LOW VF SCHOTTKY RECTIFIER

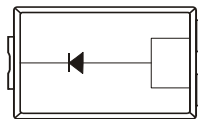
**VOLTAGE** 60 Volt **CURRENT** 10 Ampere

### 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

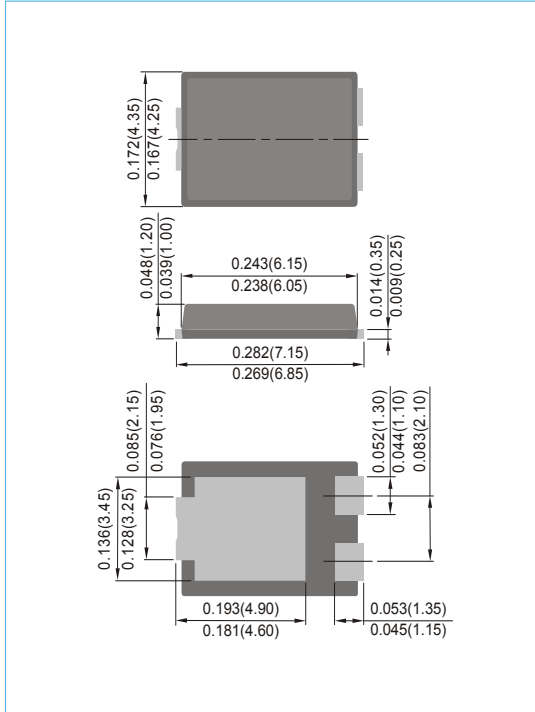
### MECHANICAL DATA

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



### TO-277B

Unit : inch(mm)



### 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 (Note 2)	R <sub>θJA</sub>	110	°C/W
Junction to Case (Note 1)	R <sub>θJC</sub>	10	
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.

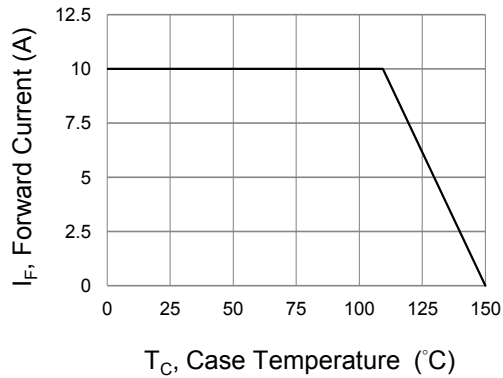


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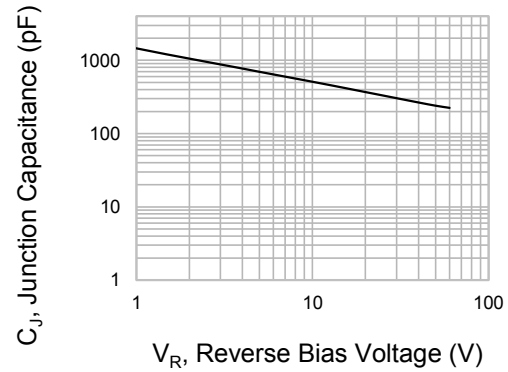
## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

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      T <sub>A</sub> =25°C	-	0.38	-	
		I <sub>F</sub> =10A	-	0.44	0.49	
		I <sub>F</sub> =1A	-	0.19	-	V
Reverse current	I <sub>R</sub>	I <sub>F</sub> =5A      T <sub>A</sub> =125°C	-	0.31	-	
		I <sub>F</sub> =10A	-	0.42	-	
		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	μA
		T <sub>A</sub> =125°C	-	20	-	mA

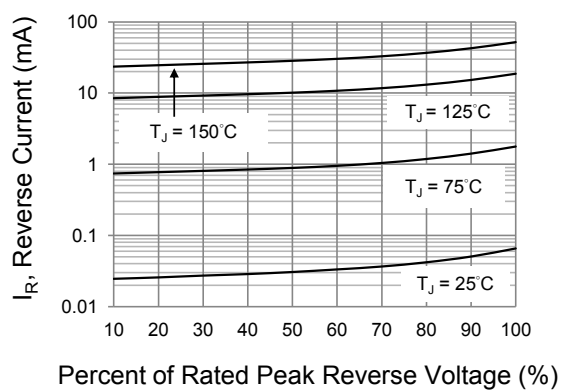
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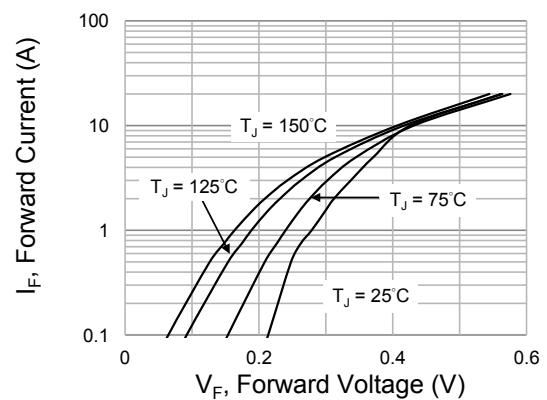
**Fig.1 Forward Current Derating Curve**



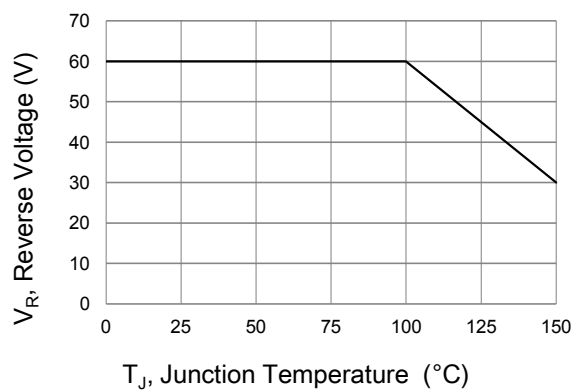
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



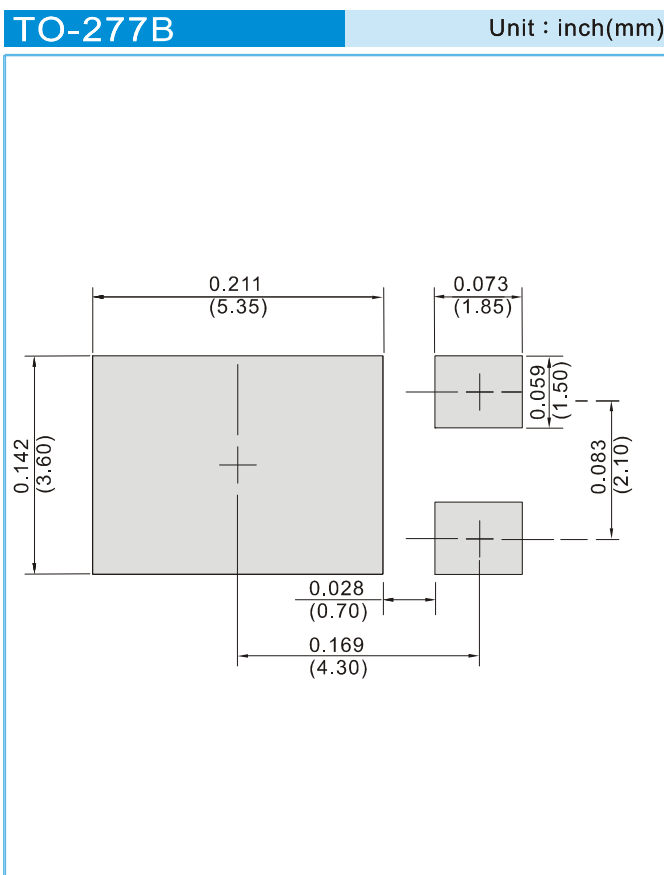
**Fig.4 Typical Forward Characteristics**



**Fig.5 Operating Temperature Derating Curve**

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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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



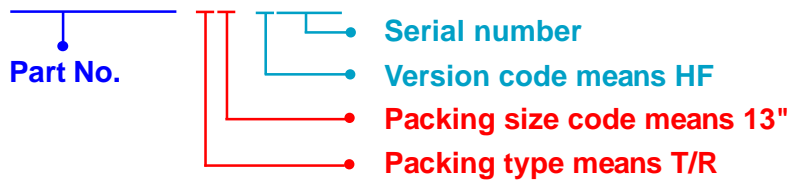
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Part No\_packing code\_Version

SVM1060XB\_R2\_00001

For example :

RB500V-40\_R2\_00001



Packing Code XX				Version Code XXXXX		
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)	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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