

# SVM1060UB

## Low $V_F$ Schottky Rectifier

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

### FEATURES

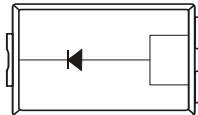
- Ideal for automated placement
- Low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

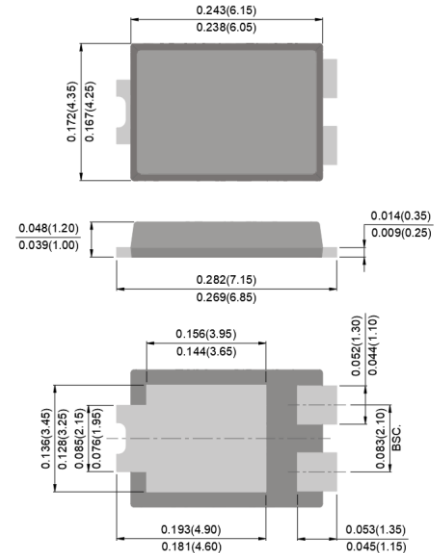
Case : TO-277B, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Approx. Weight : 0.0935 grams



### TO-277B Dimension Unit: inch(mm)



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_R$	60	V
Maximum Average Rectified Output Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	250	A
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	11	$^{\circ}\text{C/W}$
(Note 2)	$R_{\theta JA}$	110	$^{\circ}\text{C/W}$
Operating Junction Temperature Range And Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150	$^{\circ}\text{C}$

### NOTES :

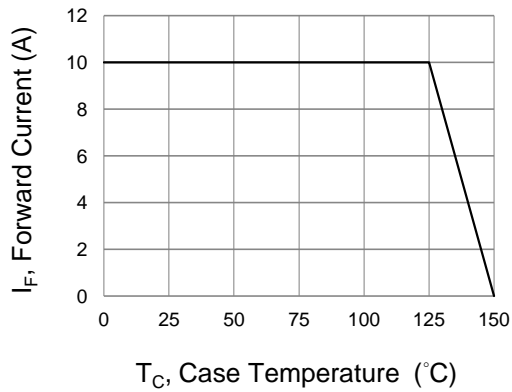
1. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.
2. Mounted on a FR4 PCB, single-sided copper, mini pad.

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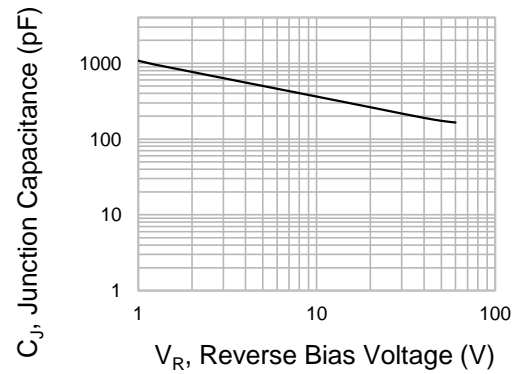
## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

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> =3A T <sub>A</sub> =25°C	-	0.36	-	V
		I <sub>F</sub> =5A T <sub>A</sub> =25°C	-	0.4	-	
		I <sub>F</sub> =10A T <sub>A</sub> =25°C	-	0.48	0.52	
		I <sub>F</sub> =3A T <sub>A</sub> =125°C	-	0.29	-	V
Reverse current	I <sub>R</sub>	I <sub>F</sub> =5A T <sub>A</sub> =125°C	-	0.35	-	
		I <sub>F</sub> =10A T <sub>A</sub> =125°C	-	0.47	-	
		V <sub>R</sub> =42V T <sub>A</sub> =25°C	-	30	-	μA
		V <sub>R</sub> =60V T <sub>A</sub> =25°C	-	-	220	μA
		V <sub>R</sub> =60V T <sub>A</sub> =125°C	-	15	-	mA

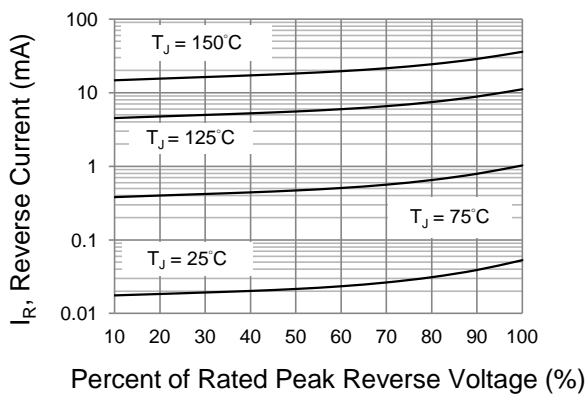
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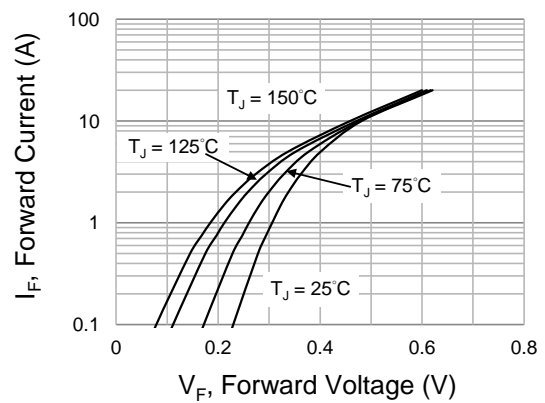
**Fig.1 Forward Current Derating Curve**



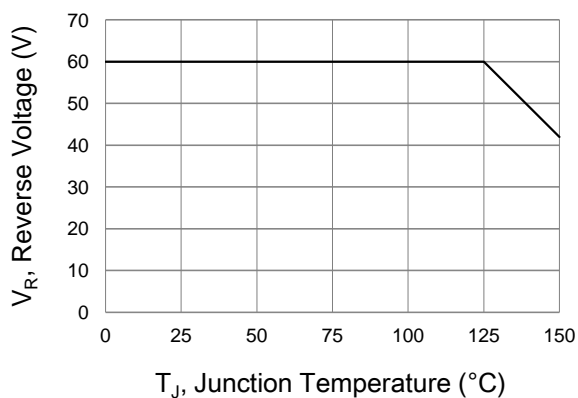
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



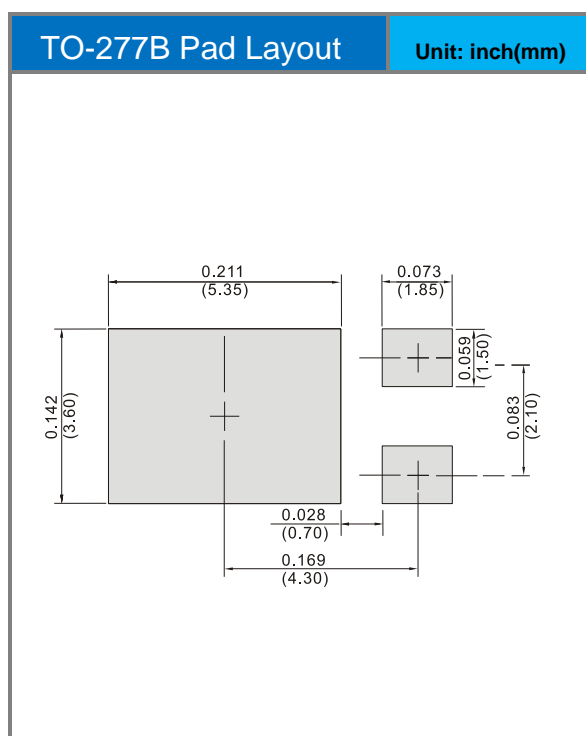
**Fig.5 Operating Temperature Derating Curve**

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## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SVM1060UB	TO-277B	5K pcs / 13" reel	SVM1060UB

## Mounting Pad Layout



## **SVM1060UB**

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