SVM1060XB

LOW VF SCHOTTKY RECTIFIER

VOLTAGE	60 Volt	CURRENT	10 Ampere

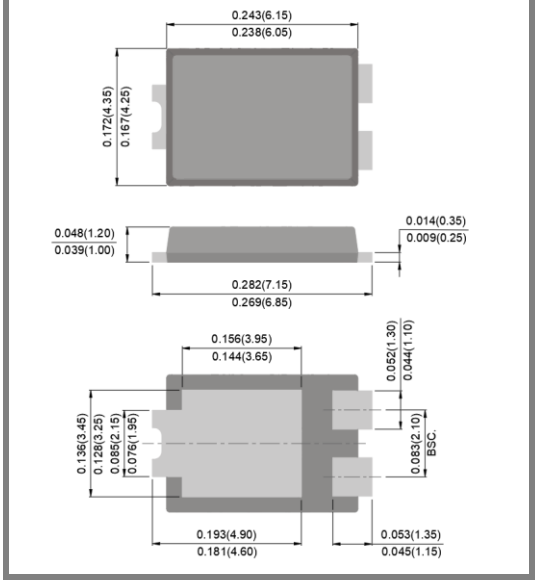
FEATURES

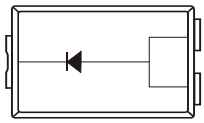
- Ideal for automated placement
- Extreme low forward voltage drop, low power losses
- High efficiency Operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in compliance with EU RoHS 2.0
- Green molding 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 Dimension — Unit: inch(mm)





MAXIMUM RATINGS(T_A=25°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}	275	A
Typical Junction Capacitance V_R=4V,1MHz	C_J	850	pF
Typical Thermal Resistance ,Junction to Ambient (Note 2) Junction to Case (Note 1)	$R_{\Theta JA}$ $R_{\Theta JC}$	110 10	°C/W
Operating junction temperature range and Storage temperature range	T_J,T_{STG}	-55 to + 150	°C

NOTES :

1.Mounted on an FR4 PCB, single-sided copper, with 100cm ^{2} copper pad area.

2.Mounted on an FR4 PCB, single-sided copper, mini pad.

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ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	I_R=0.5mA	T_A=25°C	60	-	-	V
Instantaneous forward voltage	V_F	I_F=1A I_F=5A I_F=10A	T_A=25°C	- - -	0.29 0.38 0.44	- - 0.49	V
		I_F=1A I_F=5A I_F=10A	T_A=125°C	- - -	0.19 0.31 0.42	- - -	V
Reverse current	I_R	V_R=42V	T_A=25°C	-	40	-	μA
		V_R=60V	T_A=25°C T_A=125°C	- -	- 20	360 -	μA mA

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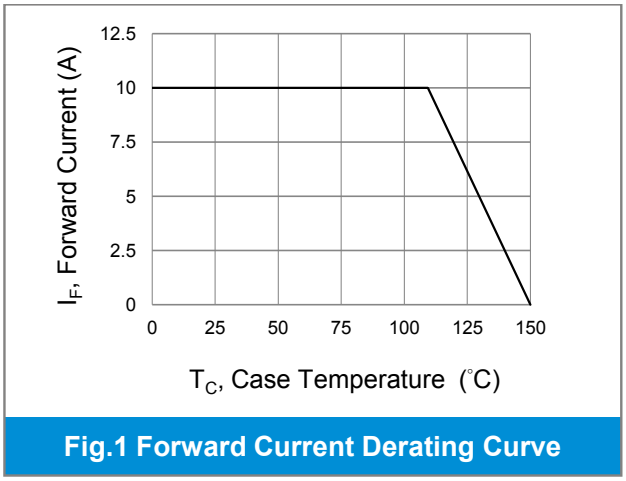

Fig.1 Forward Current Derating Curve

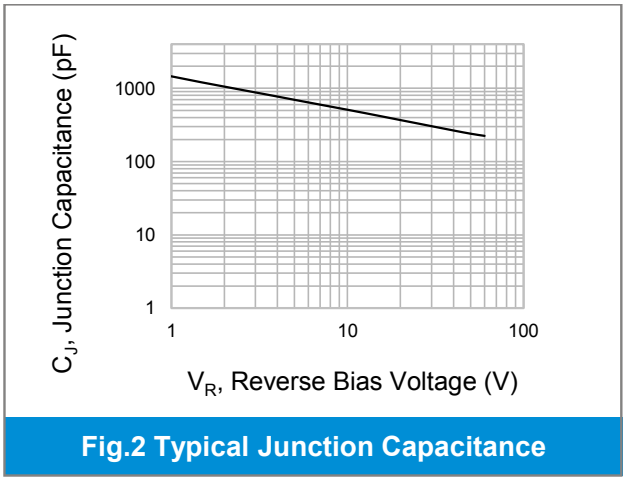

Fig.2 Typical Junction Capacitance

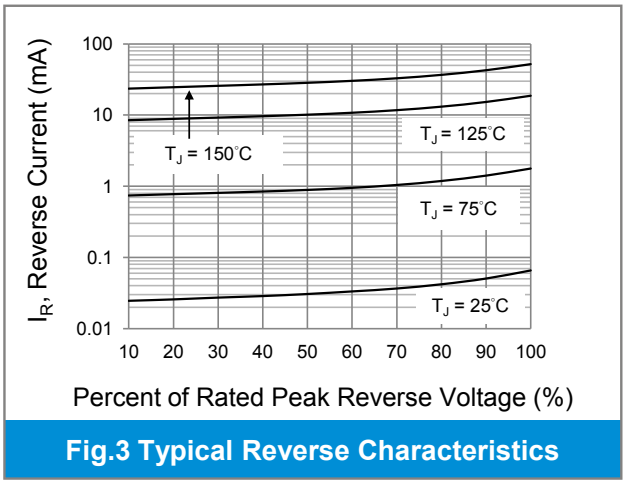

Fig.3 Typical Reverse Characteristics

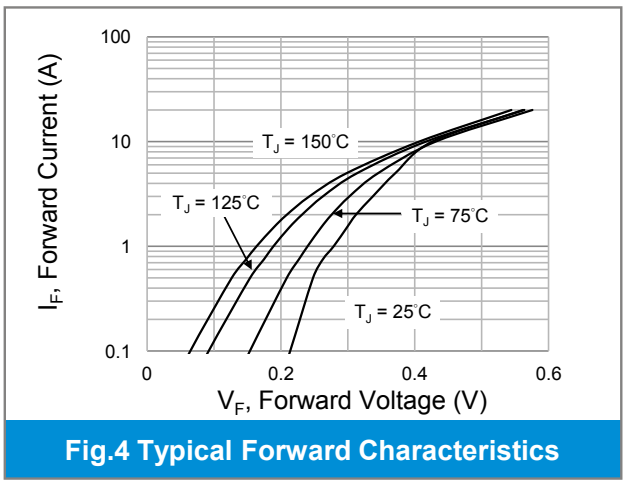

Fig.4 Typical Forward Characteristics

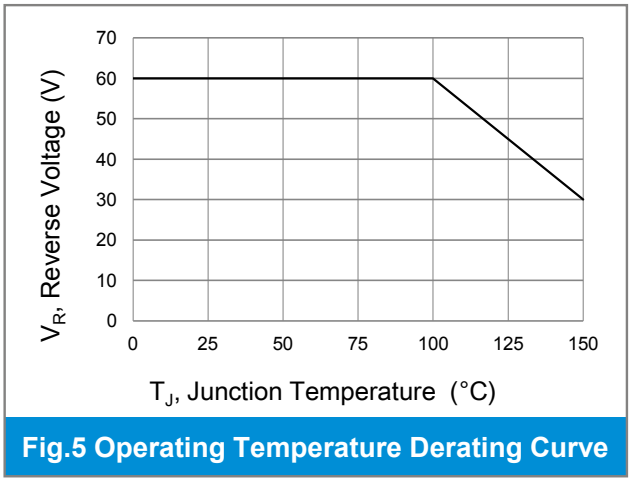

Fig.5 Operating Temperature Derating Curve

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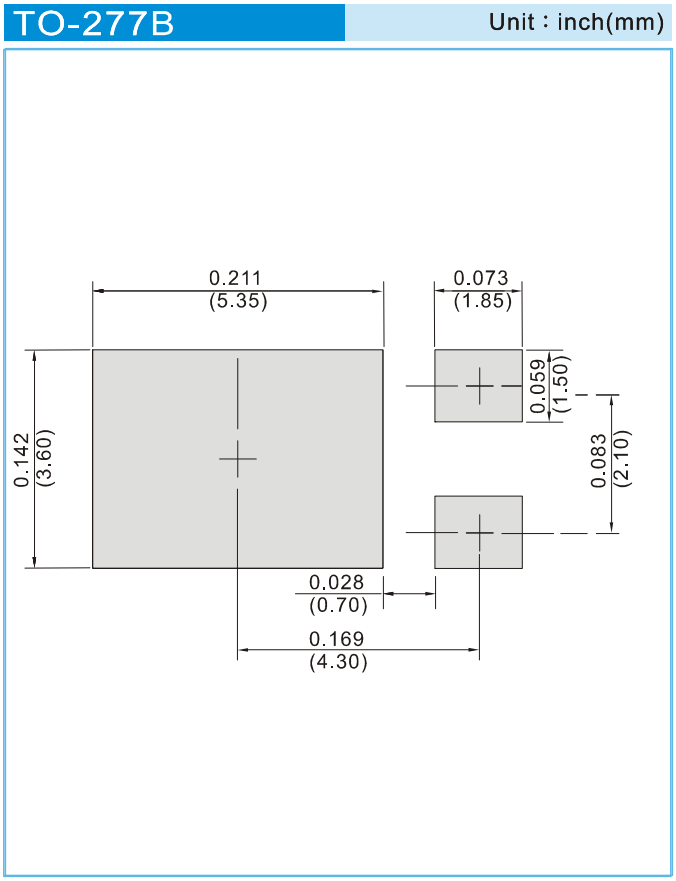
MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information

  T/R - 5K per 13" plastic Reel

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