

SVM1045V

LOW VF SCHOTTKY RECTIFIER

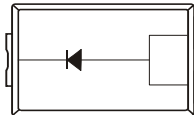
VOLTAGE 45 Volt **CURRENT** 10 Ampere

FEATURES

- Ideal for automated placement
- Ultra 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 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

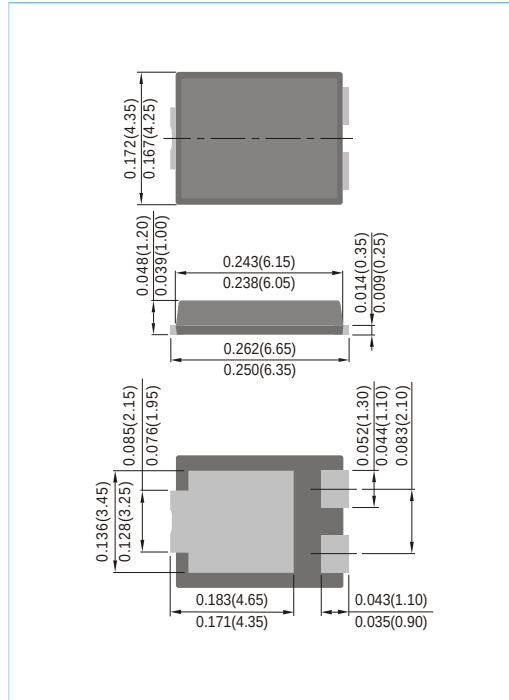
MECHANICAL DATA

- Case : TO-277, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.0037 ounces, 0.1073 grams
- Marking : SVM1045V



TO-277

Unit : inch(mm)



MAXIMUM RATINGS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	32	V
Maximum DC Blocking Voltage	V _R	45	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 Thermal Resistance ,Junction to Ambient (Note 1)	R _{θJA}	60	°C/W
Junction to Ambient (Note 2)	R _{θJA}	110	
Junction to Case (Note 3)	R _{θJC}	8	
Operating junction temperature range and Storage temperature range	T _J , T _{STG}	-55 to + 150	°C

NOTE : 1.Mounted on 50cm² FR-4 PCB.

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

3.Mounted on an FR4 PCB, single-sided copper, with 100cm² copper pad area.

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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	45	-	-	V
Instantaneous forward voltage	V _F	I _F =3A	-	0.34	-	V
		I _F =5A T _A =25°C	-	0.38	-	
		I _F =10A	-	0.44	0.47	
		I _F =3A	-	0.27	-	V
		I _F =5A T _A =125°C	-	0.32	-	
		I _F =10A	-	0.41	-	
Reverse current	I _R	V _R =36V T _A =25°C	-	32	-	μA
		V _R =45V T _A =25°C T _A =125°C	- -	- 8.6	0.25 -	mA mA

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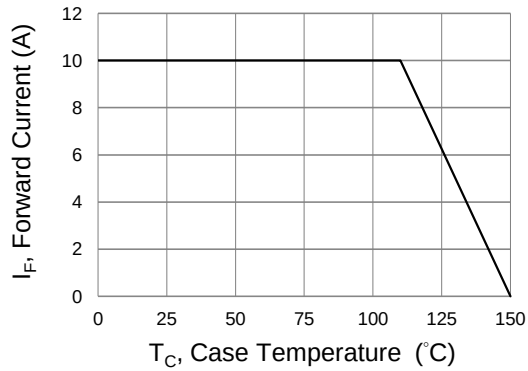


Fig.1 Forward Current Derating Curve

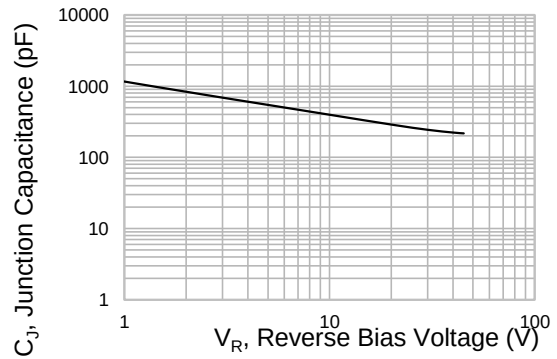


Fig.2 Typical Junction Capacitance

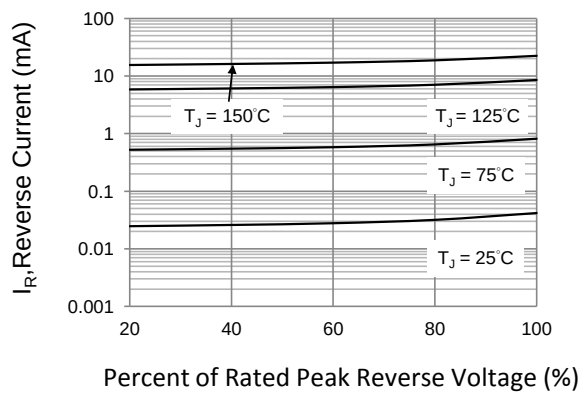


Fig.3 Typical Reverse Characteristics

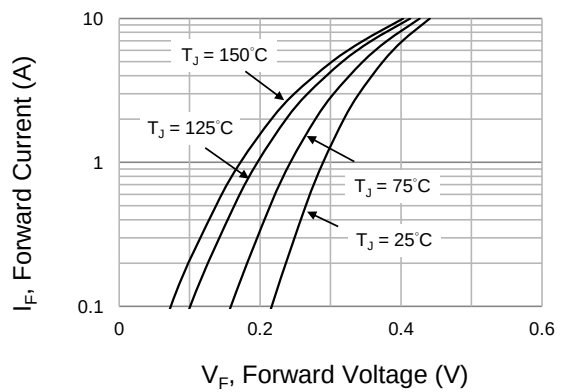


Fig.4 Typical Forward Characteristics

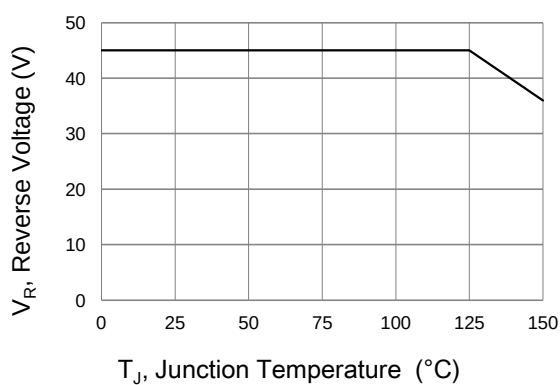
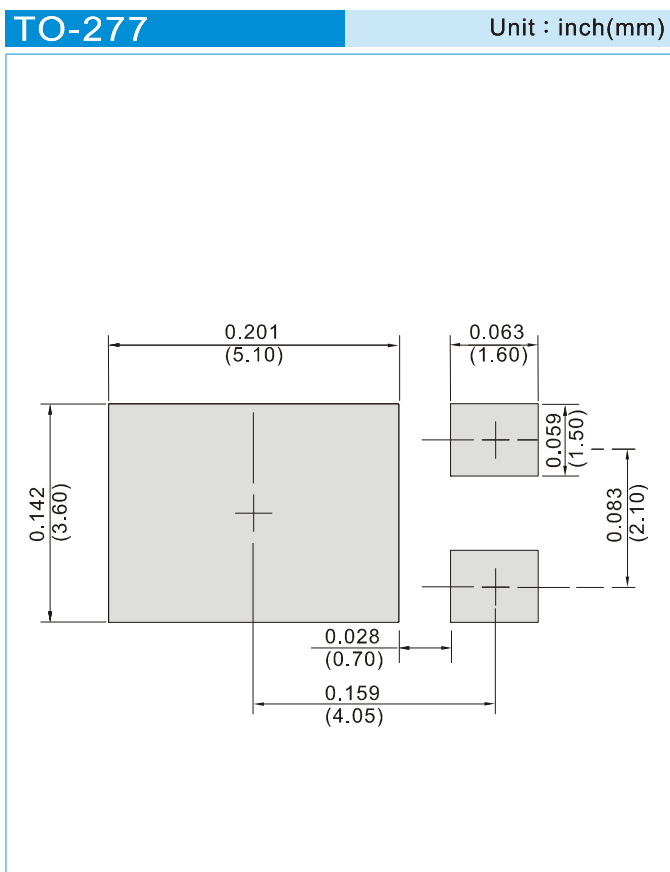


Fig.5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT



ORDER INFORMATION

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

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