

SVM1545LB

LOW VF SCHOTTKY RECTIFIER

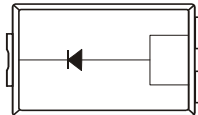
VOLTAGE 45 Volt **CURRENT** 15 Ampere

FEATURES

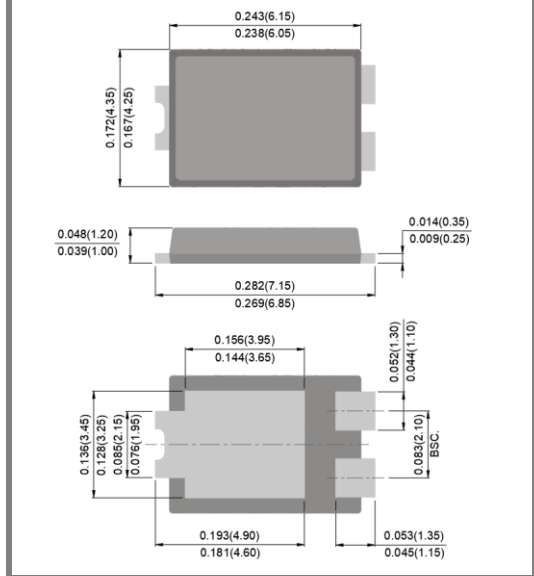
- Ideal for automated placement
- Low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : TO-277B, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.0038 ounces, 0.1088 grams
- Marking : SVM1545LB



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}	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)}	15	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	275	A
Typical Thermal Resistance (Note 1)	R _{θJC}	6	°C/W
(Note 2)	R _{θJA}	110	
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 10*10cm*0.5mm 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	45	-	-	V
Instantaneous forward voltage	V _F	I _F =1A T _A =25°C	-	0.28	-	V
		I _F =5A T _A =25°C	-	0.35	-	
		I _F =15A	-	0.43	0.49	
		I _F =1A T _A =125°C	-	0.17	-	V
Reverse current	I _R	I _F =5A T _A =125°C	-	0.27	-	
		I _F =15A	-	0.38	-	
		V _R =36V T _A =25°C	-	55	-	μA
		V _R =45V T _A =25°C	-	-	320	μA
		T _A =125°C	-	20	-	mA

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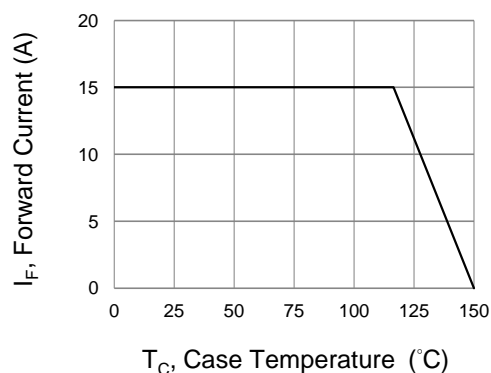


Fig.1 Forward Current Derating Curve

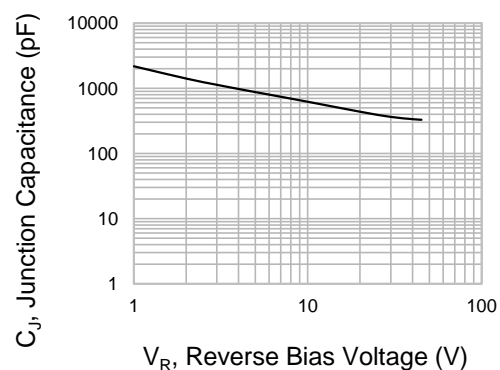


Fig.2 Typical Junction Capacitance

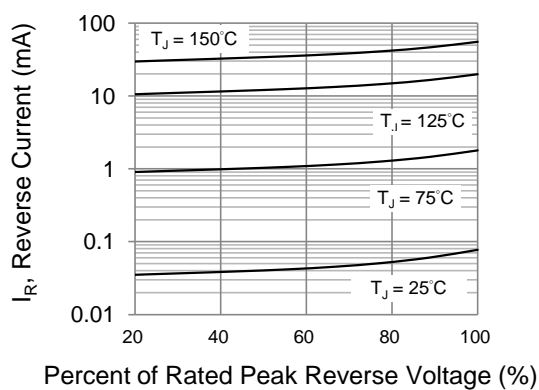


Fig.3 Typical Reverse Characteristics

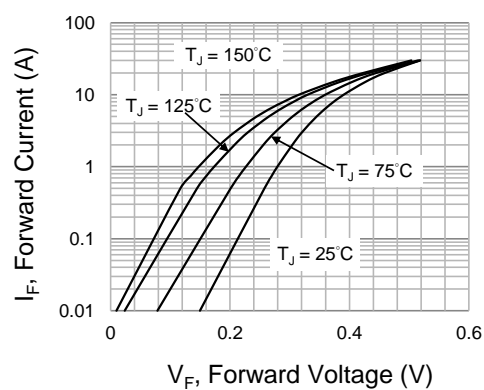


Fig.4 Typical Forward Characteristics

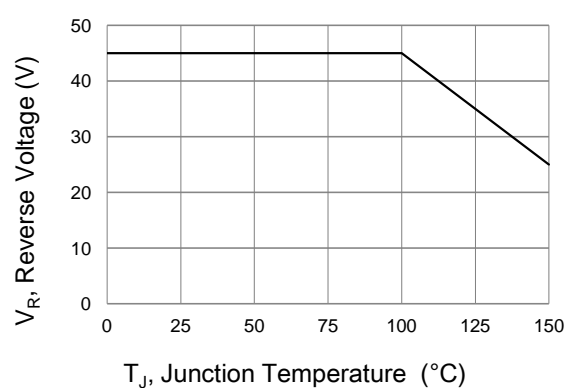


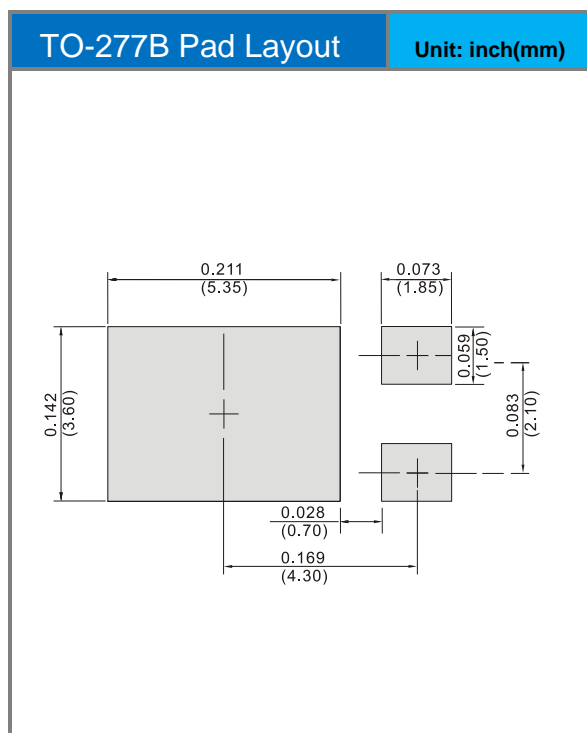
Fig.5 Operating Temperature Derating Curve

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SVM1545LB	TO-277B	5K pcs / 13" reel	SVM1545LB

Mounting Pad Layout



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