



# SVM1545LB

## LOW VF SCHOTTKY RECTIFIER

**VOLTAGE** 45 Volt **CURRENT** 15 Ampere

**TO-277B**

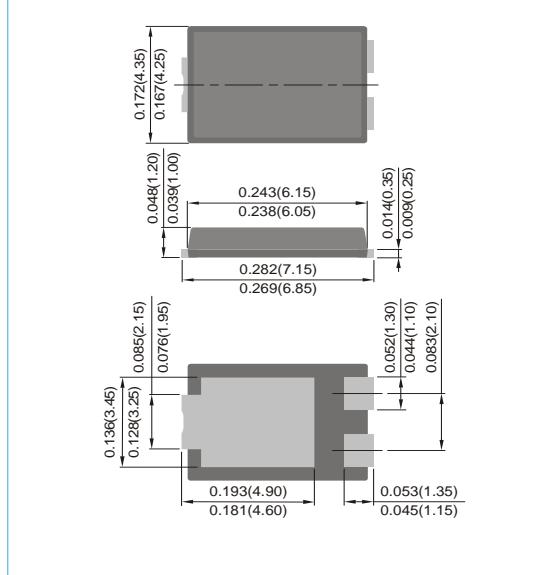
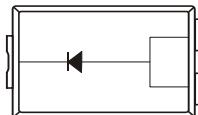
Unit : inch(mm)

### 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



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	45	V
Maximum RMS Voltage	V <sub>RMS</sub>	32	V
Maximum DC Blocking Voltage	V <sub>R</sub>	45	V
Maximum Average Rectified Output Current	I <sub>F(AV)</sub>	15	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	275	A
Typical Thermal Resistance (Note 1) (Note 2)	R <sub>θJC</sub> R <sub>θJA</sub>	6 110	°C/W
Operating Junction Temperature Range And Storage Temperature Range	T <sub>J,T<sub>STG</sub></sub>	-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 (TA=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      TA=25°C	45	-	-	V
Instantaneous forward voltage	V <sub>F</sub>	I <sub>F</sub> =1A      TA=25°C	-	0.28	-	V
		I <sub>F</sub> =5A      TA=25°C	-	0.35	-	
		I <sub>F</sub> =15A      TA=25°C	-	0.43	0.49	
	I <sub>R</sub>	I <sub>F</sub> =1A      TA=125°C	-	0.17	-	V
		I <sub>F</sub> =5A      TA=125°C	-	0.27	-	
		I <sub>F</sub> =15A      TA=125°C	-	0.38	-	
Reverse current	I <sub>R</sub>	V <sub>R</sub> =36V      TA=25°C	-	55	-	µA
		V <sub>R</sub> =45V      TA=25°C	-	-	320	µA mA
			-	20	-	



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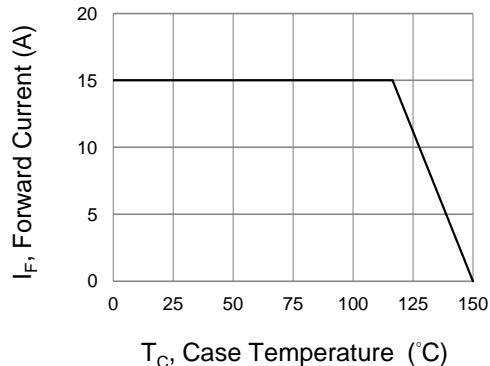


Fig.1 Forward Current Derating Curve

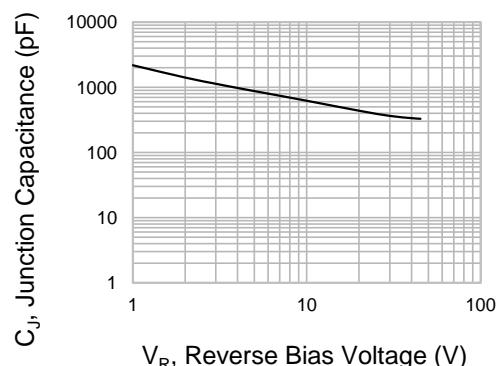


Fig.2 Typical Junction Capacitance

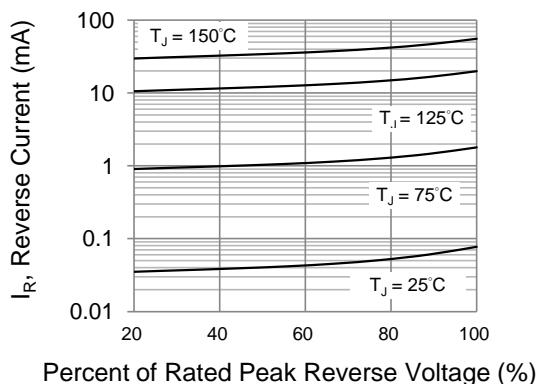


Fig.3 Typical Reverse Characteristics

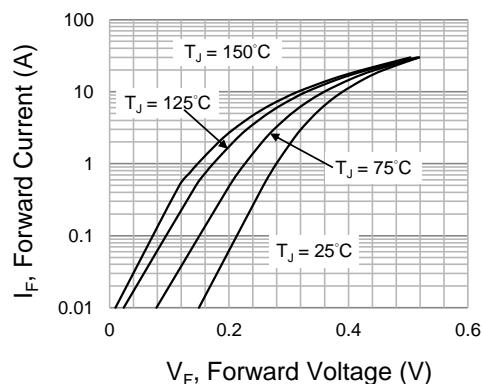


Fig.4 Typical Forward Characteristics

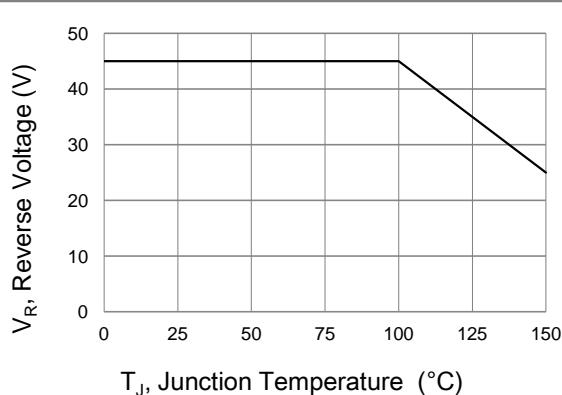
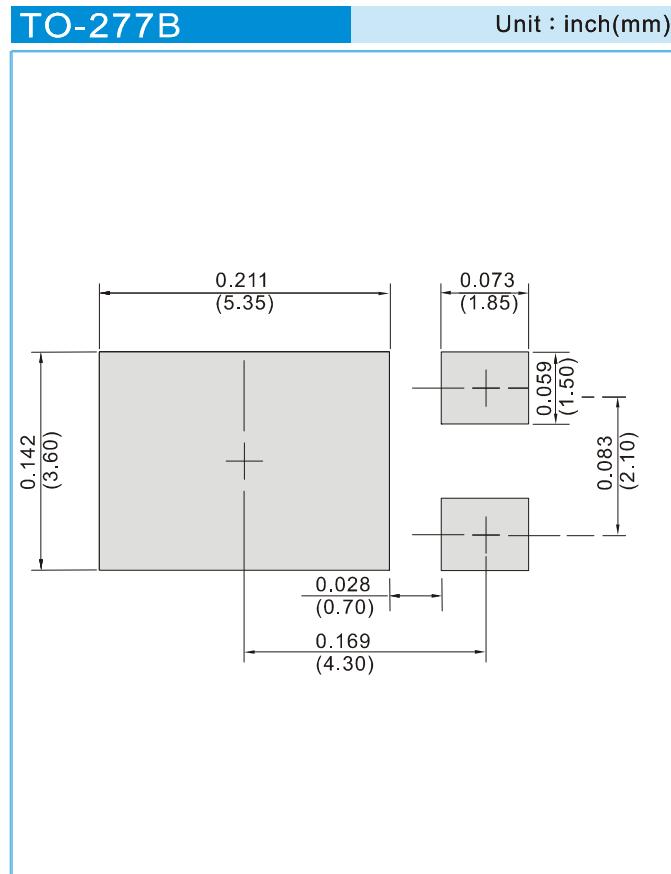


Fig.5 Operating Temperature Derating Curve



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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

SVM1545LB\_R2\_00001

For example :

RB500V-40\_R2\_00001

Part No.

- Serial number
- Version code means HF
- Packing size code means 13"
- Packing type means T/R

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			



## **SVM1545LB**

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