

# SV540B / SV5100B

## SCHOTTKY BARRIER RECTIFIER

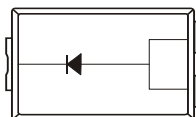
**VOLTAGE** 40~100 Volt **CURRENT** 5 Ampere

### FEATURES

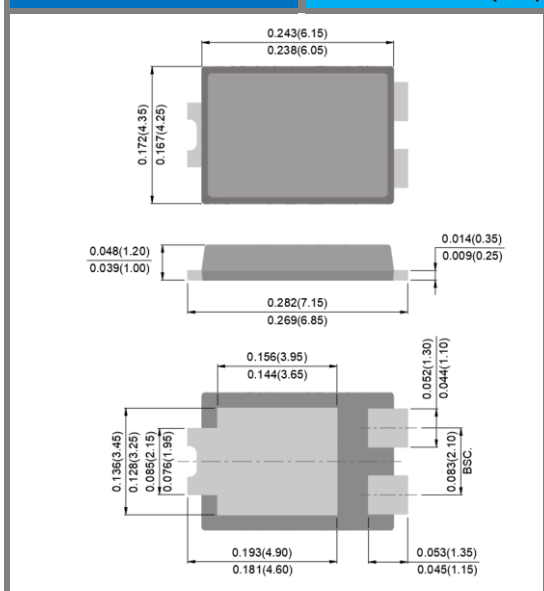
- Ideal for automated placement
- High efficiency Operation
- Low thermal resistance
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

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



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

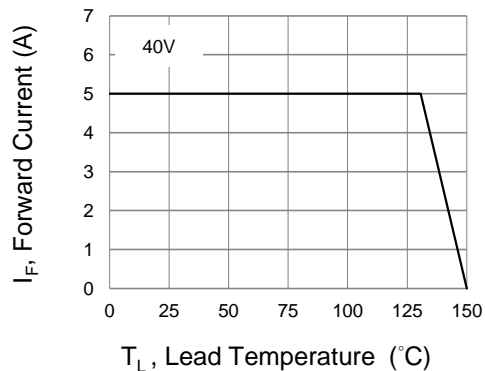


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

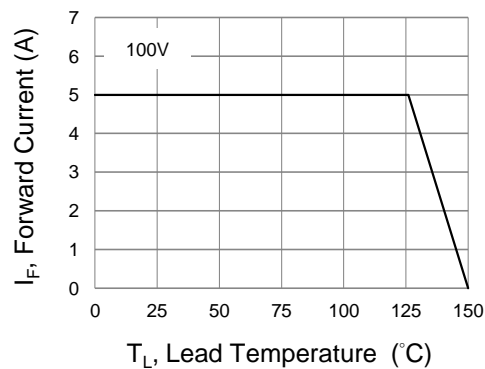
PARAMETER	SYMBOL	SV540B	SV5100B	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	70	V
Maximum DC Blocking Voltage	V <sub>R</sub>	40	100	V
Maximum Average Forward Current	I <sub>O</sub>	5		A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150		A
Maximum Forward Voltage at 5A	V <sub>F</sub>	0.52	0.87	V
Maximum DC Reverse Current T <sub>J</sub> =25°C	I <sub>R</sub>	250	15	μA
Maximum DC Reverse Current T <sub>J</sub> =100°C	I <sub>R</sub>	20	2	mA
Typical Junction Capacitance at V <sub>R</sub> =0V, f=1MHz	C <sub>J</sub>	730	475	pF
Typical Thermal Resistance, Junction to Ambient (Note 1) Junction to Lead (Note 2)	R <sub>θJA</sub> R <sub>θJL</sub>	80 15		°C/W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150		°C

NOTES:1.Mounted on minimum pad layout.  
2.Mounted on 50cm<sup>2</sup> copper pad area.

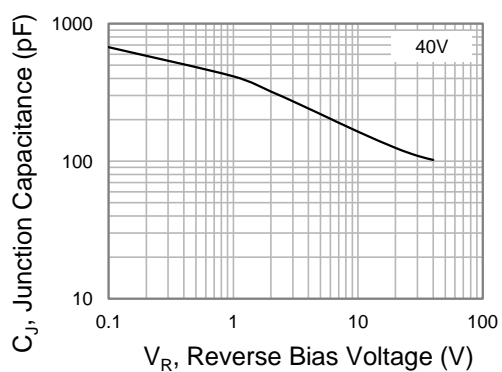
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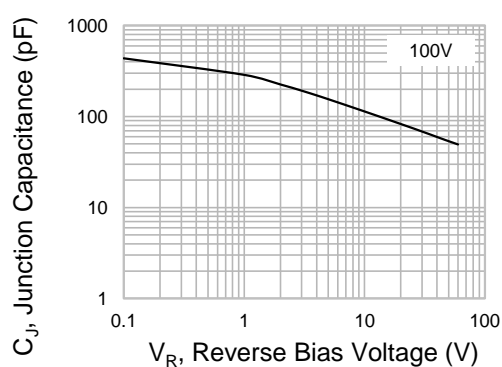
**Fig.1 Forward Current Derating Curve**



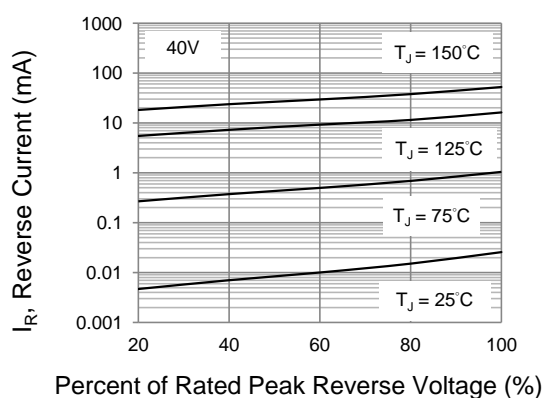
**Fig.2 Forward Current Derating Curve**



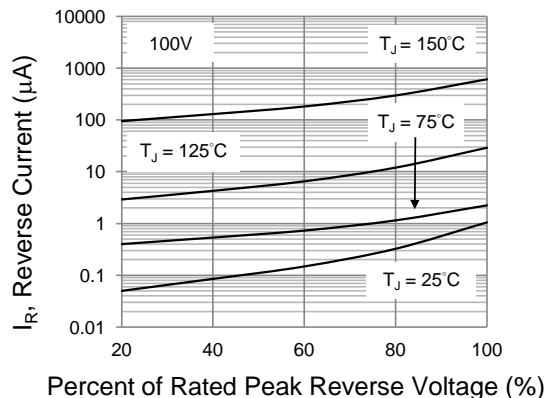
**Fig.3 Typical Junction Capacitance**



**Fig.4 Typical Junction Capacitance**

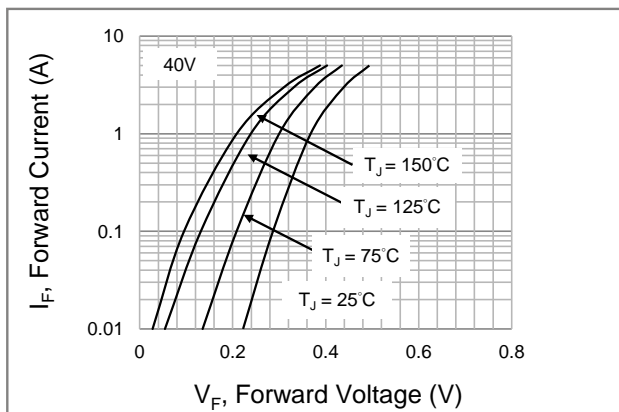


**Fig.5 Typical Reverse Characteristics**

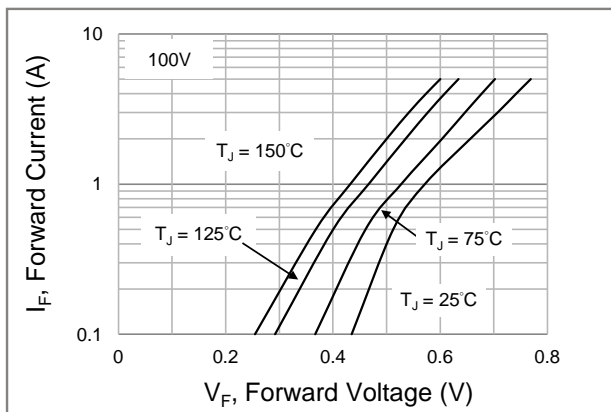


**Fig.6 Typical Reverse Characteristics**

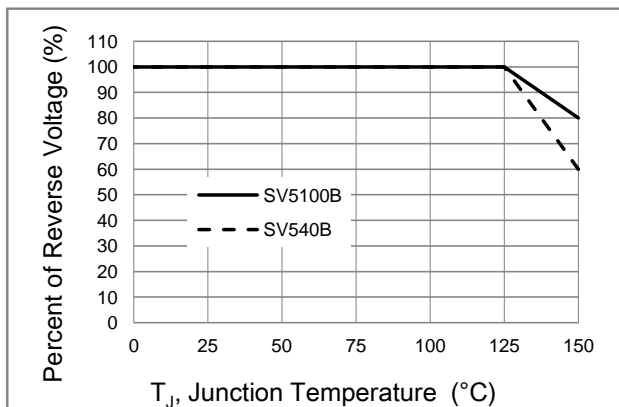
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**Fig.7 Typical Forward Characteristics**



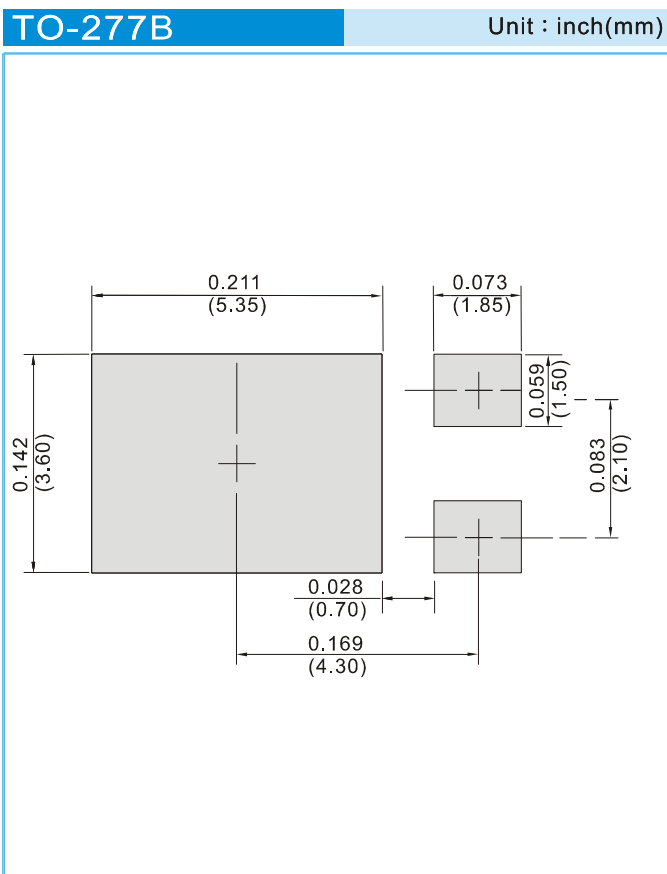
**Fig.8 Typical Forward Characteristics**



**Fig.9 Operating Temperature Derating Curve**

# SV540B / SV5100B

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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



## SV540B / SV5100B

Part No.\_packing code\_Version

SV540B\_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 <b>XX</b>				Version Code <b>XXXXX</b>		
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)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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