



# SV540B / SV5100B

## SCHOTTKY BARRIER RECTIFIER

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

### 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)

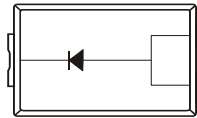
### MECHANICAL DATA

Case : TO-277B, Plastic

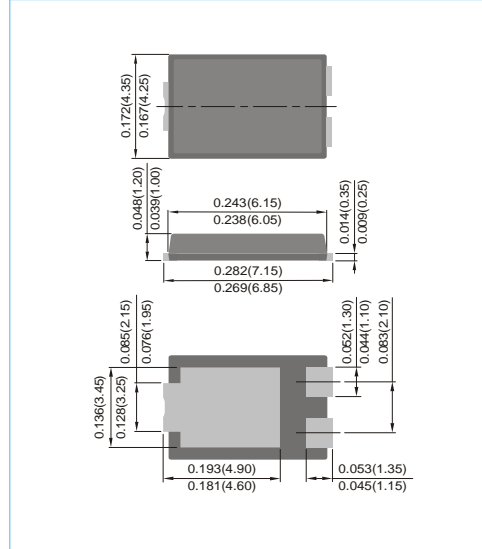
Terminals : Solderable per MIL-STD-750, Method 2026

Weight : 0.0038 ounces, 0.1088 grams

Marking : Part number



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



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

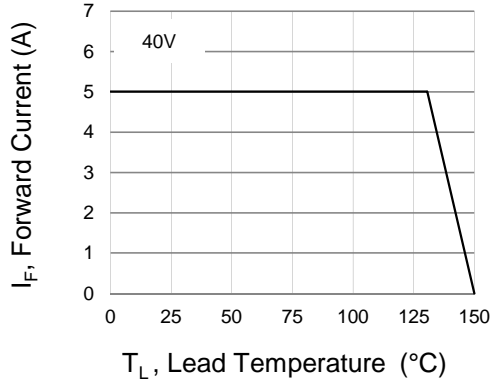
PARAMETER	SYMBOL	SV540B	SV5100B	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	100	V
Maximum RMS Voltage	$V_{RMS}$	28	70	V
Maximum DC Blocking Voltage	$V_R$	40	100	V
Maximum Average Forward Current	$I_O$	5		A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	150		A
Maximum Forward Voltage at 5A	$V_F$	0.52	0.87	V
Maximum DC Reverse Current	$I_R$	250	15	$\mu$ A
Typical Junction Capacitance at $V_R=0V$ , $f=1MHz$	$C_J$	730	475	pF
Typical Thermal Resistance, Junction to Ambient (Note 1) Junction to Lead (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	80 15		$^{\circ}C/W$
Operating Junction Temperature and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150		$^{\circ}C$

### NOTES:

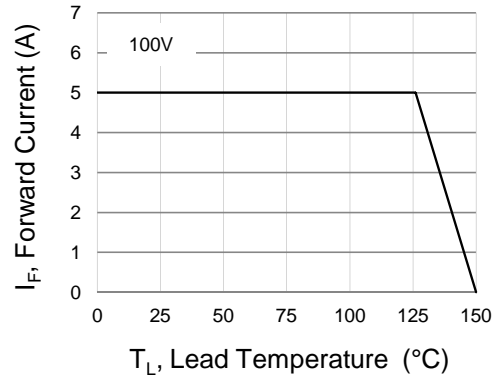
- 1.Mounted on minimum pad layout.
- 2.Mounted on 50cm<sup>2</sup> copper pad area.



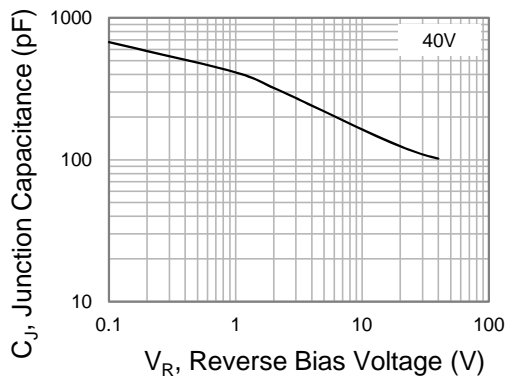
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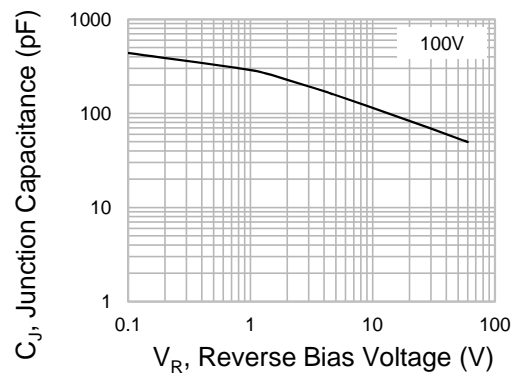
**Fig.1 Forward Current Derating Curve**



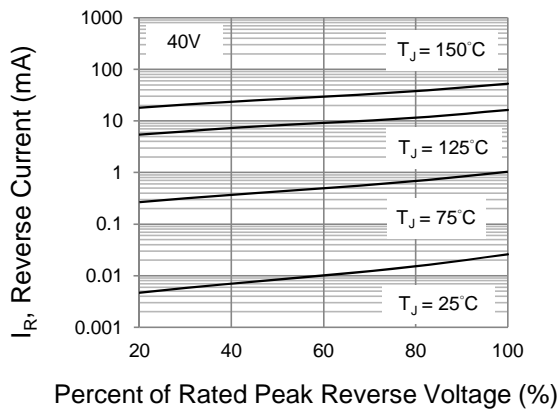
**Fig.2 Forward Current Derating Curve**



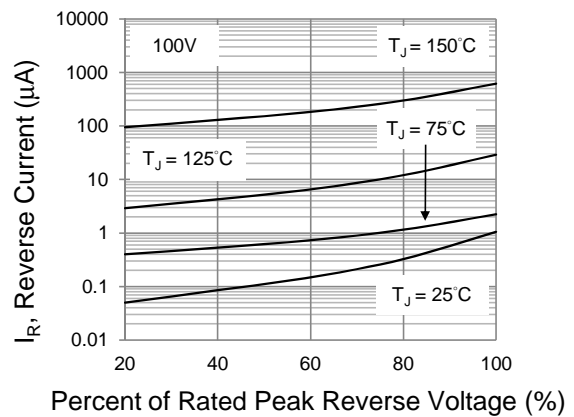
**Fig.3 Typical Junction Capacitance**



**Fig.4 Typical Junction Capacitance**



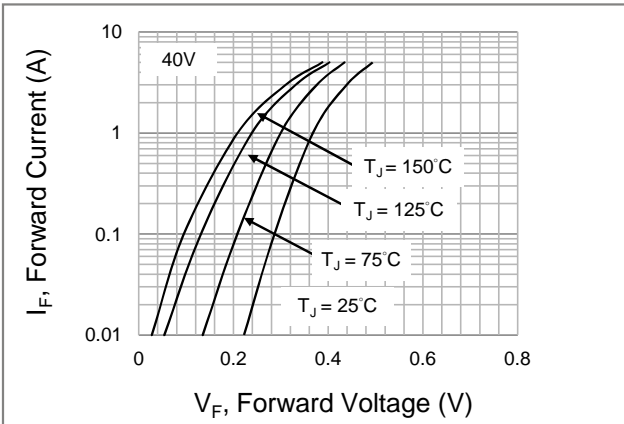
**Fig.5 Typical Reverse Characteristics**



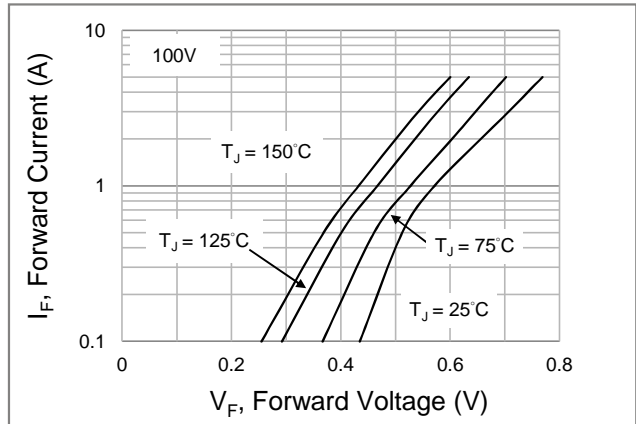
**Fig.6 Typical Reverse Characteristics**



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**Fig.7 Typical Forward Characteristics**



**Fig.8 Typical Forward Characteristics**

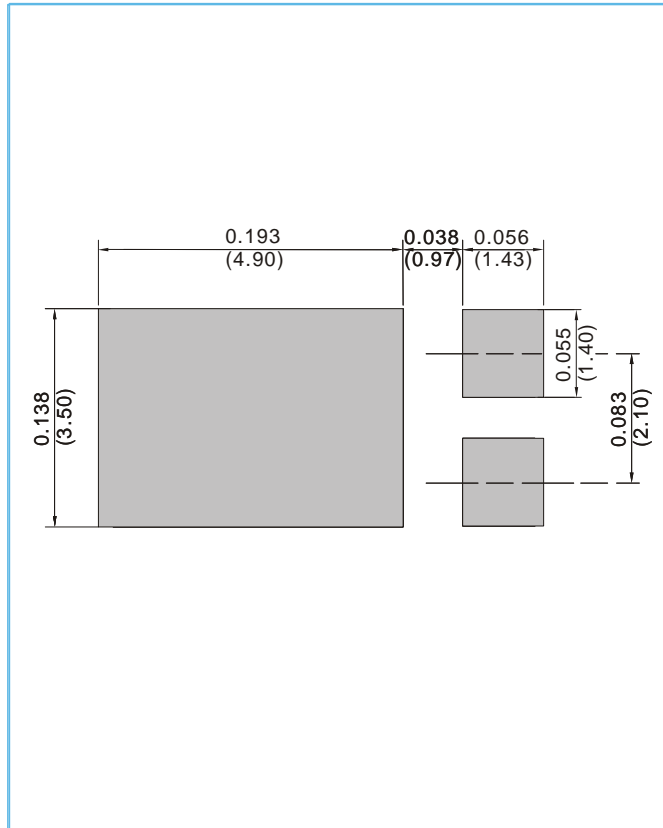


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## MOUNTING PAD LAYOUT

TO-277B

Unit : inch(mm)



## ORDER INFORMATION

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



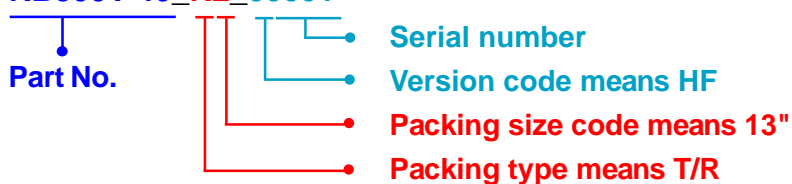
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Part No\_packing code\_Version

SV540B\_R2\_00001

For example :

RB500V-40\_R2\_00001



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)	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			



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