



#### **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**

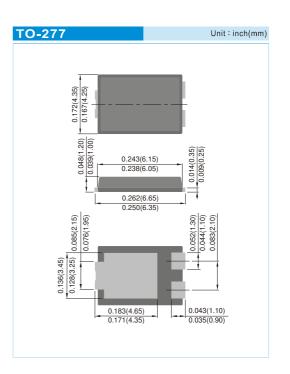
· Case: TO-277, Plastic

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

• Weight: 0.0037 ounces, 0.1073 grams

· Marking: Part number





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

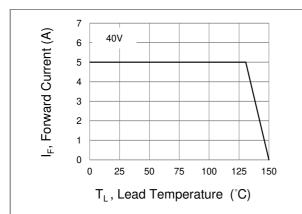
PARAMETER			SV540	SV5100	UNITS
Maximum Recurrent Peak Reverse Voltage			40	100	V
Maximum RMS Voltage			28	70	V
Maximum DC Blocking Voltage			40	100	V
Maximum Average Forward Current at Temp=75°C		I <sub>o</sub>	5		Α
Peak Forward Surge Current : 8.3ms single half sine-wave superimpos rated load	ed on	I <sub>FSM</sub> 150		50	Α
Maximum Forward Voltage at 5A		V <sub>F</sub>	0.52	0.87	٧
Maximum DC Reverse Current T <sub>J</sub> =2	25°C	I <sub>R</sub>	250	15	μА
Maximum DC Reverse Current $T_{J}$ =	100°C	I <sub>R</sub>	20	2	m A
Typical Junction Capacitance at VR=0V, f=1MHz		CJ	730	475	pF
ypical Thermal Resistance, Junction to Ambient (Note 1) Junction to Lead (Note 2)		R <sub>eja</sub> R <sub>ejl</sub>	80 15		°C/W
Operating Junction Temperature and Storage Temperature Range		$T_J,T_STG$	-55 to +150		°C

NOTES: 1.Mounted on minimum pad layout.

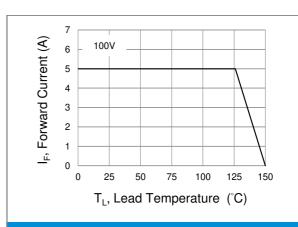
2.Mounted on 50cm<sup>2</sup> copper pad area.







**Fig.1 Forward Current Derating Curve** 



**Fig.2 Forward Current Derating Curve** 

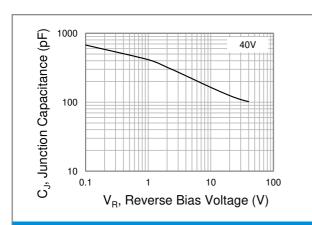


Fig.3 Typical Junction Capacitance

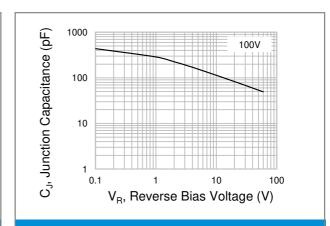


Fig.4 Typical Junction Capacitance

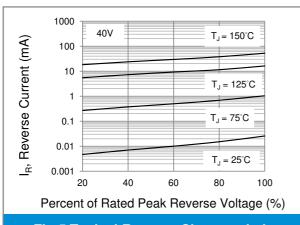
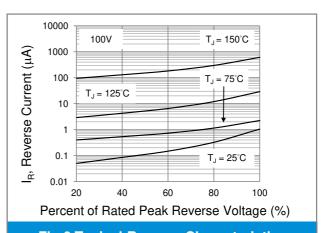


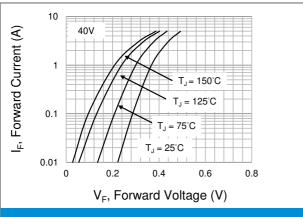
Fig.5 Typical Reverse Characteristics



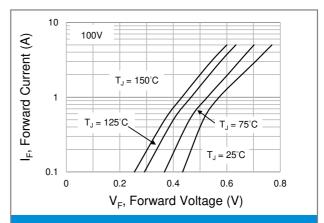
**Fig.6 Typical Reverse Characteristics** 



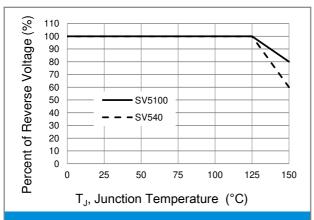




**Fig.7 Typical Forward Characteristics** 



**Fig.8 Typical Forward Characteristics** 

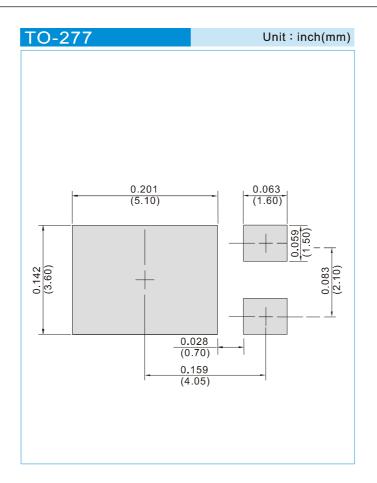


**Fig.9 Operating Temperature Derating Curve** 





#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

· Packing information

T/R - 5K per 13" plastic Reel

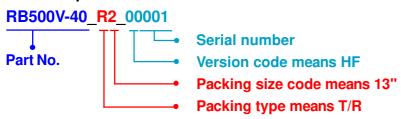




### Part No\_packing code\_Version

SV540\_R2\_00001

### For example:



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)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	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				





### **Disclaimer**

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation.
   Customers are responsible in comprehending the suitable use in particular applications.
   Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.