



#### LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volts CURRENT 10 Ampers

#### **FEATURES**

- · Ideal for automated placement
- · Low forward voltage drop, low power losses
- · High efficiency operation
- · Low thermal resistance
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

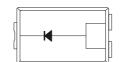
#### **MECHANICAL DATA**

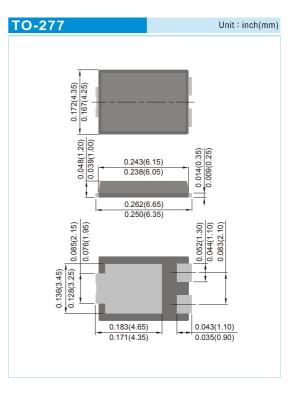
Case: TO-277, Plastic

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

Weight: 0.0037 ounces, 0.1073 grams

Marking: SV10100U





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

PARAMETER			VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage		VRRM	100	٧
Maximum RMS Voltage		VRMS	70	V
Maximum DC Blocking Voltage		VR	100	V
Average Rectified Output Current		l f(AV)	10	Α
Peak forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	300	Α
Typical Thermal Resistance, Junction to Ambient Junction to Lead	(Notes 1) (Notes 1)	Roja Rojl	23 10	°C/W
Operating Junction Temperature and Storage Temperature range		Т <sub>Ј</sub> ,Тѕтс	-55 to + 150	°C

#### Notes :

1. Mounted on 25cm<sup>2</sup> copper pad area.





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

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage	VBR	I R=0.5mA	TA=25°C	100	-	-	V
Instantaneous forward voltage	VF	IF=3A IF=5A IF=10A IF=3A	Ta=25°C	- - -	0.48 0.55 0.65 0.40	- - 0.68 -	V
		I F=5A I F=10A	T <sub>A</sub> =125°C	- -	0.47 0.56	-	V
Reverse current	IR	VR=60V	T <sub>A</sub> =25°C	-	6	-	μΑ
		V <sub>R</sub> =100V	T <sub>A</sub> =25°C T <sub>A</sub> =125°C	-	9.3	0.15 -	mA

### RATING AND CHARACTERISTIC CURVES

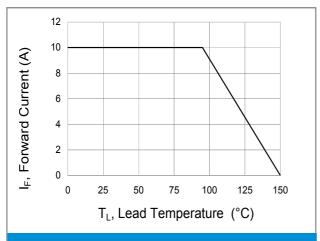
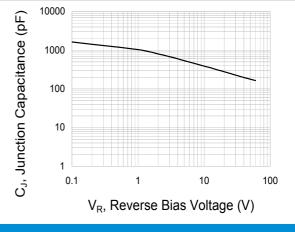
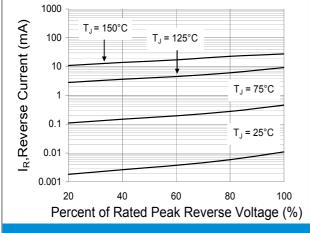


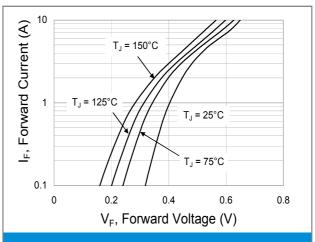
Fig.1 Forward Current Derating Curve



**Fig.2 Typical Junction Capacitance** 



**Fig.3 Typical Reverse Characteristics** 

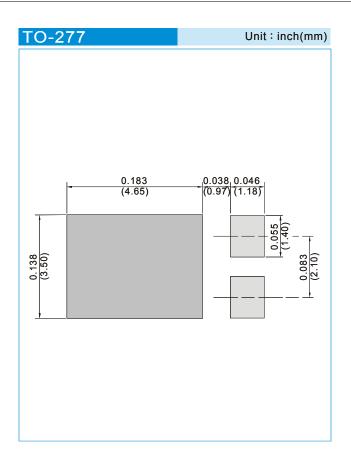


**Fig.4 Typical Forward Characteristics** 





### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

Packing information

T/R - 5K per 13" plastic Reel





## Part No\_packing code\_Version

SV10100U\_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.