



#### **ULTRA LOW VF SCHOTTKY RECTIFIER**

VOLTAGE 45 Volt CURRENT 8 Ampere

#### **FEATURES**

- Ideal for automated placement
- Ultra 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)

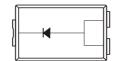
#### **MECHANICAL DATA**

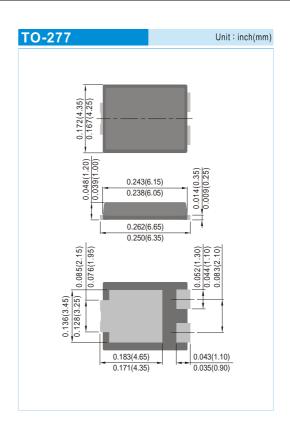
• Case: TO-277, Plastic

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

• Weight: 0.0038 ounces, 0.1073 grams

• Marking : SVM845L





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

PARAMETER			VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage		VRRM	45	٧
Maximum RMS Voltage		VRMS	32	V
Maximum DC Blocking Voltage		VR	45	٧
Maximum Average Rectified Output Current		l f(AV)	8	Α
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load		İFSM	150	Α
Typical Junction Capacitance (VR=4V, f=1MHz)		Сл	500	pF
IVDICAL INERMAL RESISTANCE	ote 1) ote 2)	Røjc Røja	15 110	°C/W
Operating Junction Temperature Range And Storage Temperature Range		Тл,Твтв	-55 to + 150	°C

#### NOTES:

- 1. Mounted on an FR4 PCB, single-sided copper, with 100cm2 copper pad area
- 2. Mounted on an FR4 PCB, single-sided copper, mini pad.



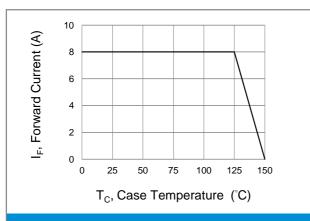


## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Instantaneous forward voltage	VF	I F=1A I F=5A I F=8A	Ta=25°C		0.3 0.4 0.45	- - 0.5	V
			T <sub>A</sub> =125°C	- - -	0.21 0.35 0.42		٧
Reverse current	1-	VR=36V	Ta=25°C	-	55	-	μΑ
	IR	VR=45V	T <sub>A</sub> =25°C T <sub>A</sub> =125°C	-	- 20	250 -	μA mA







**Fig.1 Forward Current Derating Curve** 

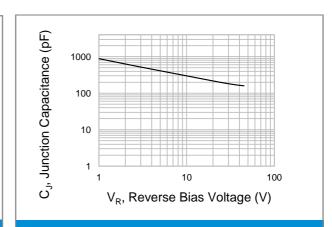


Fig.2 Typical Junction Capacitance

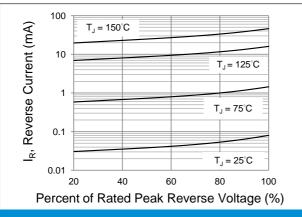


Fig.3 Typical Reverse Characteristics

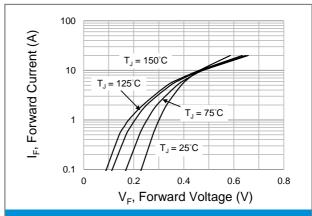
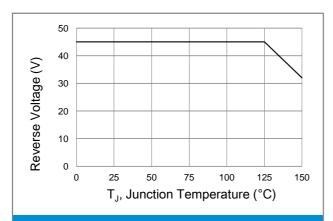


Fig.4 Typical Forward Characteristics

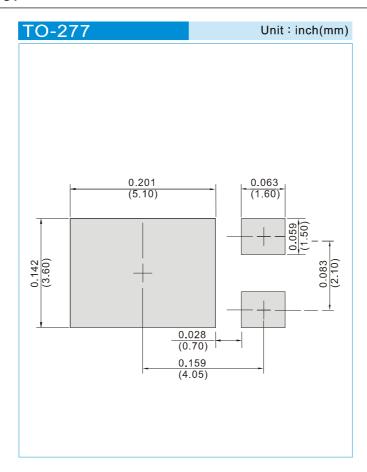


**Fig.5 Operating Temperature Derating Curve** 





### **MOUNTING PAD LAYOUT**



### ORDER INFORMATION

Packing information

T/R - 5K per 13" plastic Reel





## Part No\_packing code\_Version

SVM845L\_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	Х				
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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