



# SVM845L

## ULTRA LOW VF SCHOTTKY RECTIFIER

**VOLTAGE** 45 Volts **CURRENT** 8 Amperes

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

### FEATURES

- Ideal for automated placement
- Ultra Low forward voltage drop, low power losses
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

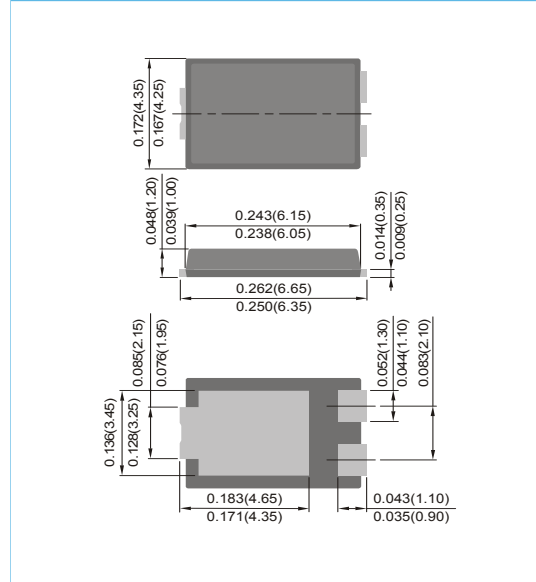
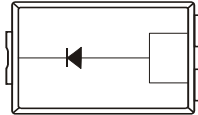
### MECHANICAL DATA

Case : TO-277, Plastic

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

Weight : 0.0037 ounces, 0.1073 grams

Marking : SVM845L



### MAXIMUM RATINGS( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	45	V
Maximum RMS Voltage	$V_{RMS}$	32	V
Maximum DC Blocking Voltage	$V_R$	45	V
Maximum Average Rectified Output Current	$I_{F(AV)}$	8	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150	A
Typical Junction Capacitance ( $V_R=4V$ , $f=1\text{MHz}$ )	$C_J$	500	pF
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JA}$	15 110	$^{\circ}\text{C/W}$
Operating Junction Temperature Range And Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150	$^{\circ}\text{C}$

#### NOTES :

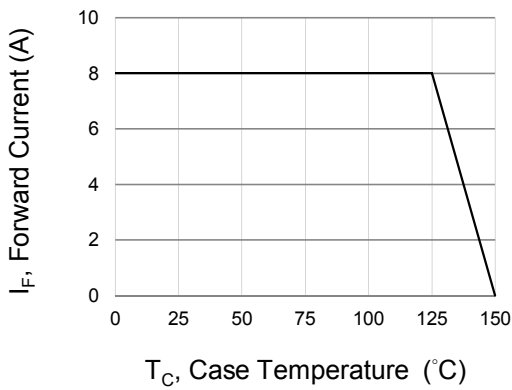
1. Mounted on an FR4 PCB, single-sided copper, with  $100\text{cm}^2$  copper pad area
2. Mounted on an FR4 PCB, single-sided copper, mini pad.



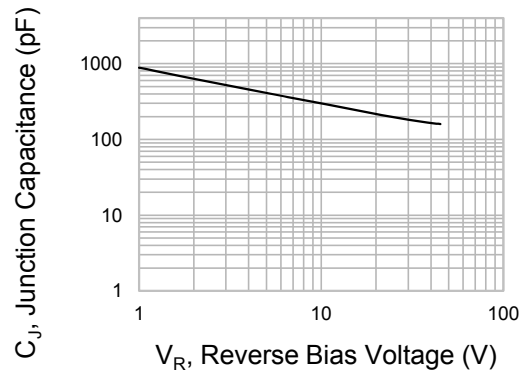
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## ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

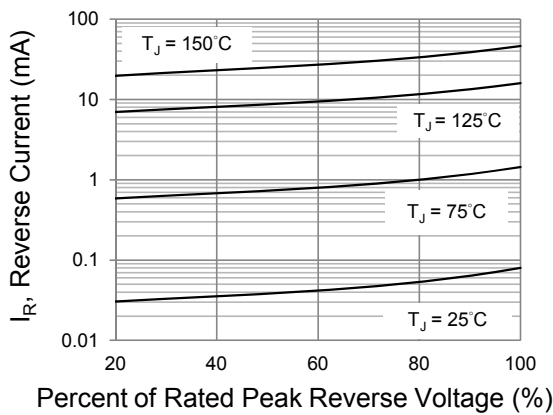
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT	
Instantaneous forward voltage	V <sub>F</sub>	I <sub>F</sub> =1A	-	0.3	-	V	
		I <sub>F</sub> =5A	-	0.4	-		
		I <sub>F</sub> =8A	-	0.45	0.5		
		TA=125°C	I <sub>F</sub> =1A	-	0.21	-	V
			I <sub>F</sub> =5A	-	0.35	-	
			I <sub>F</sub> =8A	-	0.42	-	
Reverse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



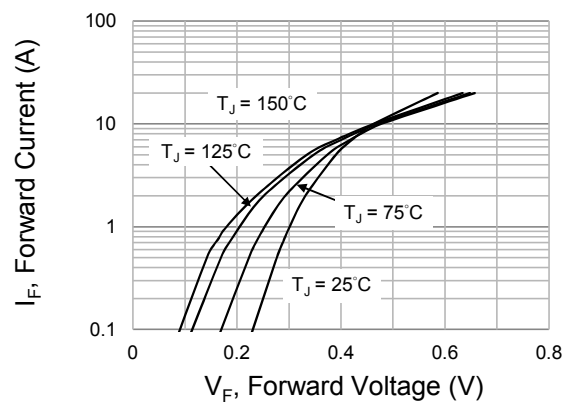
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

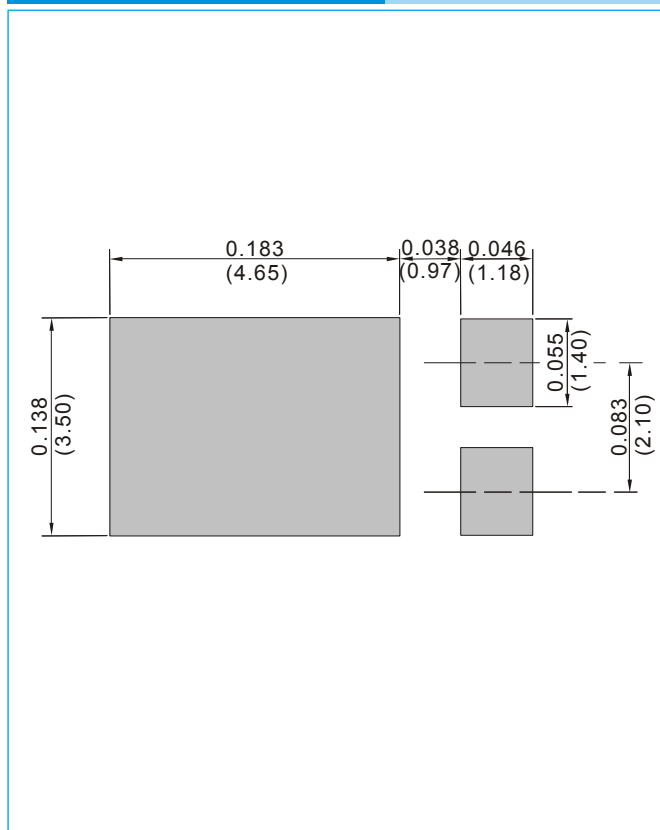


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## MOUNTING PAD LAYOUT

TO-277

Unit : inch(mm)



## ORDER INFORMATION

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



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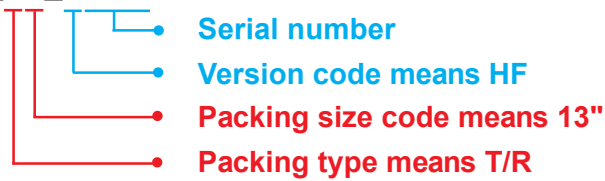
## Part No\_packing code\_Version

SVM845L\_R2\_00001

For example :

**RB500V-40\_R2\_00001**

Part No.



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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