



SVM1045VA

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volt **CURRENT** 10 Ampere

FEATURES

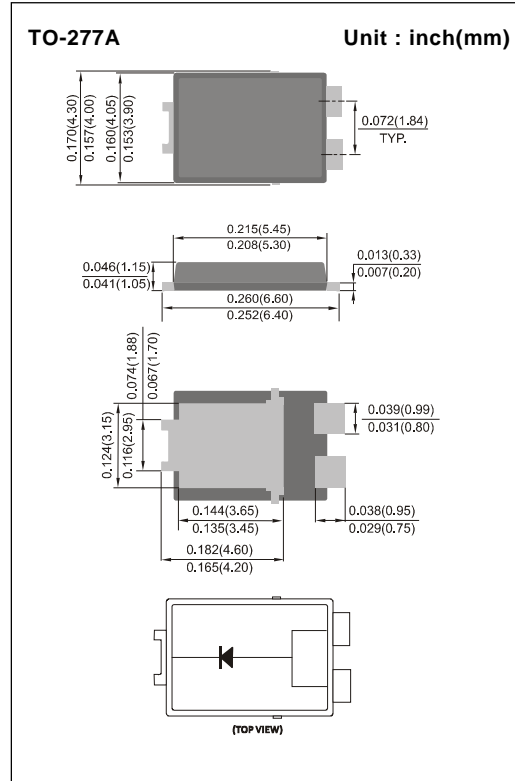
- Ideal for automated placement
- Ultra low forward voltage drop, low power loss
- High efficiency Operation
- Low thermal resistance
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case : TO-277A, Plastic

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

Weight : 0.003 ounces, 0.0855 grams



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	$I_{F(AV)}$	10	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	275	A
Typical Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$	110	$^{\circ}\text{C}/\text{W}$
Junction to Case (Note 1)	$R_{\theta JC}$	8	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range And Storage Temperature Range	T_J, T_{STG}	-55 to + 150	$^{\circ}\text{C}$

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



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ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =0.5mA T _A =25°C	45	-	-	V
Instantaneous forward voltage	V _F	I _F =3A I _F =5A I _F =10A T _A =25°C	-	0.34 0.38 0.44	- - 0.47	V
		I _F =3A I _F =5A I _F =10A T _A =125°C	-	0.27 0.32 0.41	- - -	V
Reverse current	I _R	V _R =36V T _A =25°C	-	32	-	μA
		V _R =45V T _A =25°C T _A =125°C	- -	- 8.6	0.25 -	mA mA

RATING AND CHARACTERISTIC CURVES

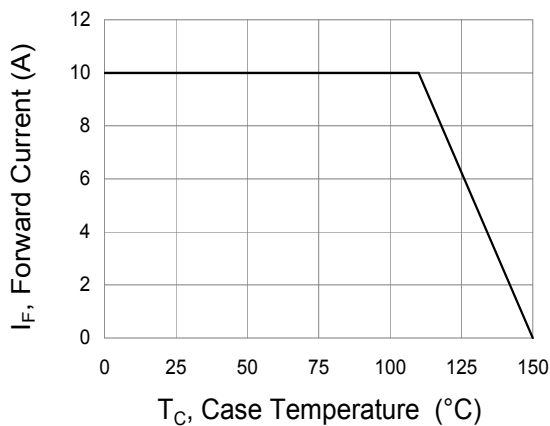


Fig.1 Forward Current Derating Curve

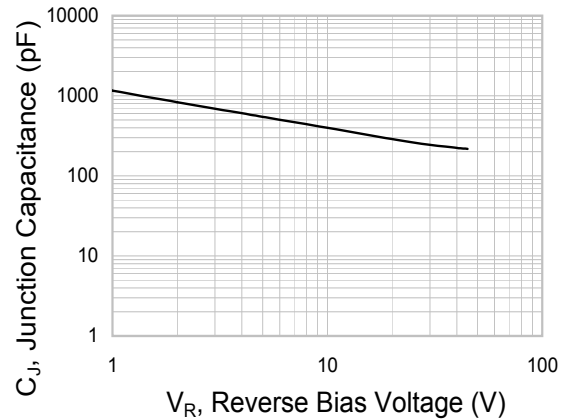


Fig.2 Typical Junction Capacitance

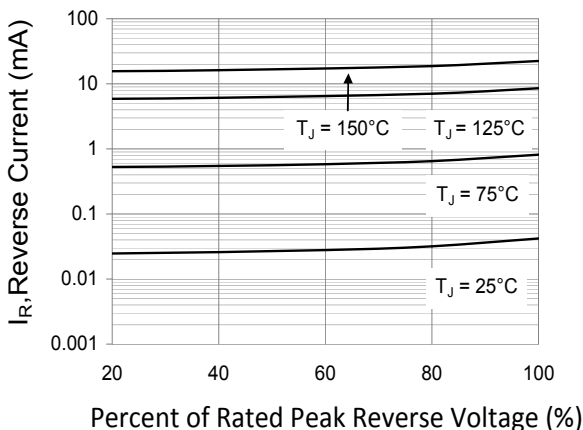


Fig.3 Typical Reverse Characteristics

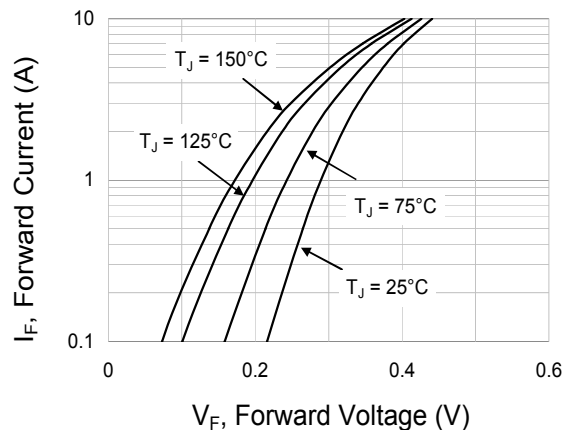


Fig.4 Typical Forward Characteristics

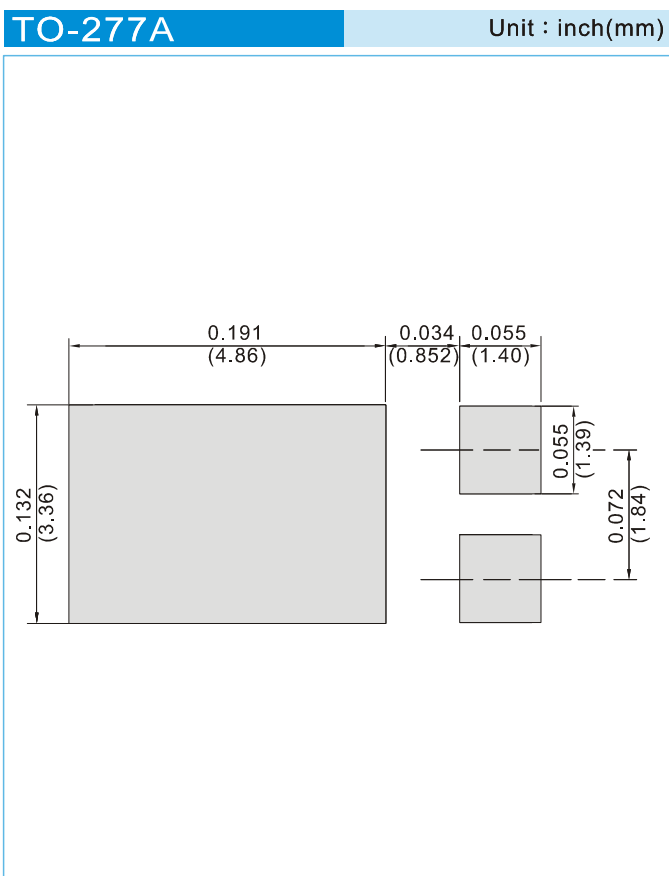


SVM1045VA

PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
SVM1045VA_R2_00001	TO-277A	5K pcs / 13" reel	SVM1045V	Halogen free

MOUNTING PAD LAYOUT





SVM1045VA

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