SVC12120VB

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE	120 Volt	CURRENT	12 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)

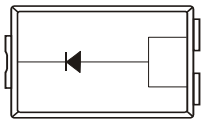
MECHANICAL DATA

Case : TO-277B, Plastic

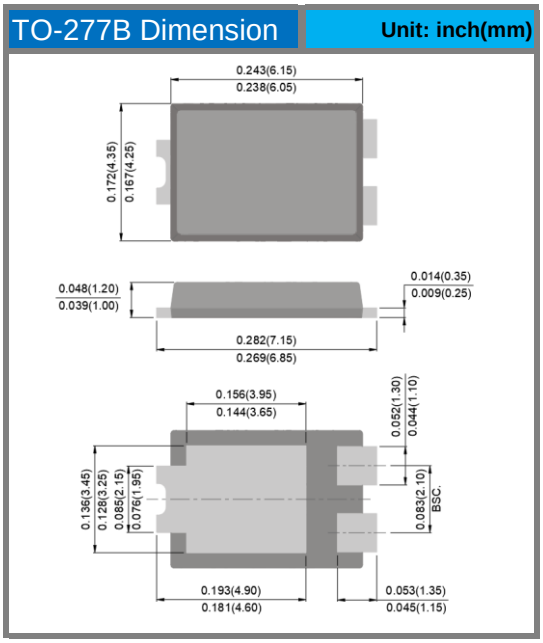
Terminals : Solderable per MIL-STD-750, Method 2026

Weight : 0.0038 ounces, 0.1088 grams

Marking : Part number



TO-277B Dimension — Unit: inch(mm)



MAXIMUM RATINGS(T_A=25°C unless otherwise noted)

PARAMETER		SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	120	V
Maximum RMS Voltage		V_{RMS}	85	V
Maximum DC Blocking Voltage		V_R	120	V
Maximum Average Rectified Output Current		$I_{F(AV)}$	12	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	200	A
Typical Thermal Resistance	(Note 2) (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$	110 3	°C/W
Operating Junction Temperature Range And Storage Temperature Range		T_J,T_{STG}	-55 to + 150	°C

NOTES : 1.Mounted on a FR4 PCB, single-sided copper, mini pad.
2.Mounted on 10cm*10cm*0.5mm copper pad area

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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	120	-	-	V
Instantaneous forward voltage	V_F	I_F=1A I_F=6A I_F=12A	T_A=25°C	- - -	0.4 0.59 0.71	- - 0.77	V
		I_F=1A I_F=6A	T_A=125°C	- -	0.29 0.51	- -	V
Reverse current	I_R	V_R=96V	T_A=25°C	-	10	-	μA
		V_R=120V	T_A=25°C T_A=125°C	- -	- 35	100 -	μA mA

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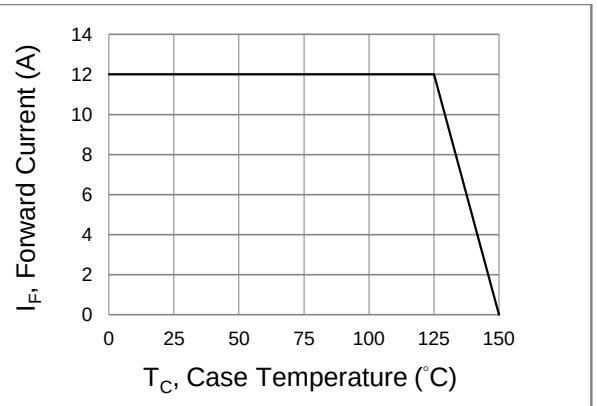


Fig.1 Forward Current Derating Curve

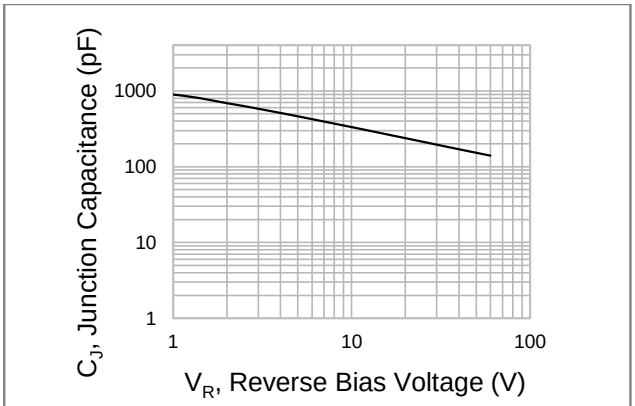


Fig.2 Typical Junction Capacitance

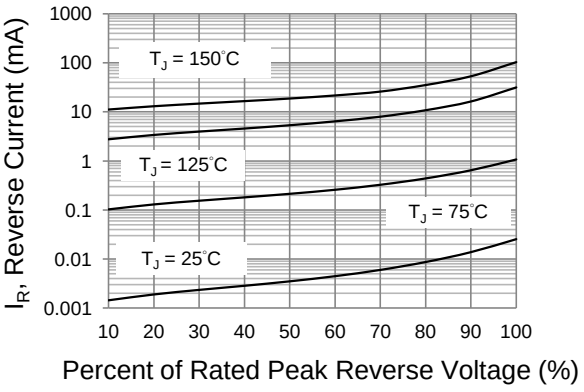


Fig.3 Typical Reverse Characteristics

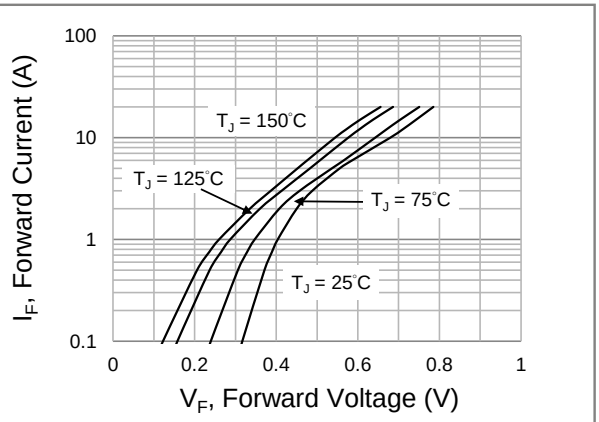


Fig.4 Typical Forward Characteristics

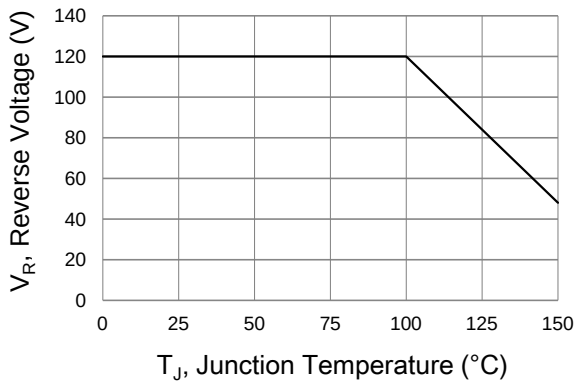


Fig.5 Operating Temperature Derating Curve

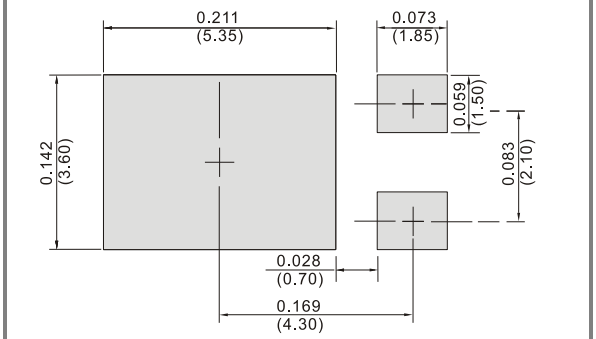
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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SVC12120VB	TO-277B	5K pcs / 13” reel	SVC12120VB

Mounting Pad Layout

TO-277B Pad Layout Unit: inch(mm)



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