



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)

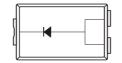
MECHANICAL DATA

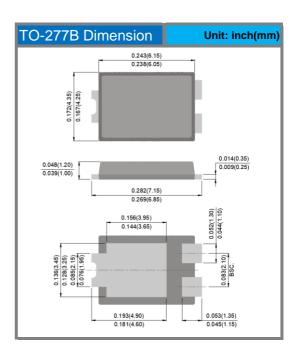
Case: TO-277B, Plastic

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

Weight: 0.0038 ounces, 0.1088 grams

Marking: Part number





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

| PARAMETER | | SYMBOL | VALUE | UNIT |
|---|----------------------|--------------|--------------|------|
| Maximum Recurrent Peak Reverse Voltage | | VRRM | 120 | ٧ |
| Maximum RMS Voltage | | VRMS | 85 | ٧ |
| Maximum DC Blocking Voltage | | VR | 120 | V |
| Maximum Average Rectified Output Current | | l F(AV) | 12 | Α |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | | IFSM | 200 | Α |
| Typical Thermal Resistance | (Note 2) (Note 1) | Roja Rojc | 110 3 | °C/W |
| Operating Junction Temperature Range And Storage Temperature Range | | ТЈ,Тѕтс | -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





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

| PARAMETER | SYMBOL | TEST CONDITIONS | | MIN. | TYP. | MAX. | UNIT |
|-------------------------------|--------|---|---|-------------|-------------------------------------|--------------------------|----------|
| Breakdown voltage | VBR | I R=0.5mA | Ta=25°C | 120 | - | - | V |
| Instantaneous forward voltage | VF | I F=1A I F=6A I F=12A I F=1A I F=6A | Ta=25°C | - - - | 0.4 0.59 0.71 0.29 0.51 | - - 0.77 - - | V |
| Davis and a second | 1- | VR=96V | T _A =25°C | - | 10 | - | μА |
| Reverse current | l R | VR=120V | T _A =25°C T _A =125°C | | - 35 | 100 | μA mA |





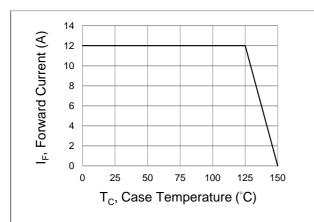


Fig.1 Forward Current Derating Curve

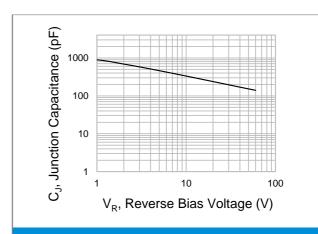


Fig.2 Typical Junction Capacitance

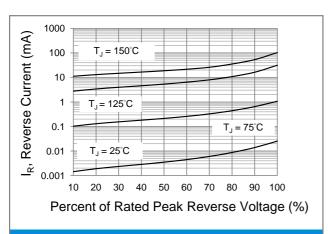


Fig.3 Typical Reverse Characteristics

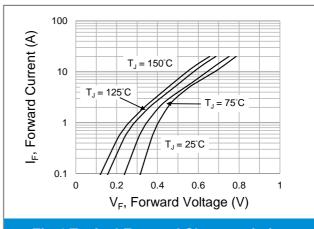


Fig.4 Typical Forward Characteristics

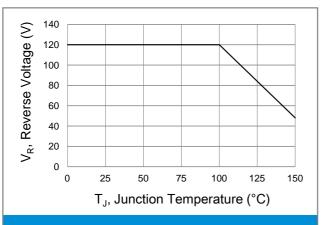
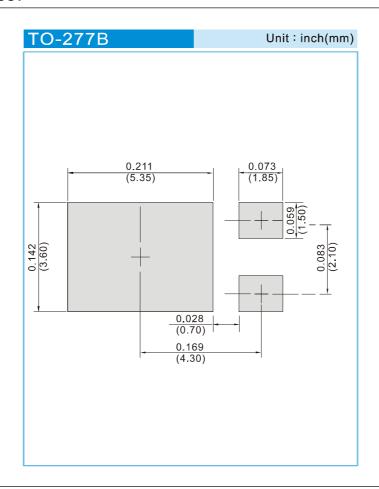


Fig.5 Operating Temperature Derating Curve





MOUNTING PAD LAYOUT



ORDER INFORMATION

Packing information

T/R - 5K per 13" plastic Reel





Part No_packing code_Version

SVC12120VB_R2_00001

For example :



| Packing Code XX | | | Version Code XXXXX | | | |
|--------------------------------------|----------------------|-----------------------------------|----------------------|------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th 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 | Υ | | | |
| 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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