



SVM1545L

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volts **CURRENT** 15 Amperes

TO-277 Unit : inch(mm)

FEATURES

- Ideal for automated placement
- 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)

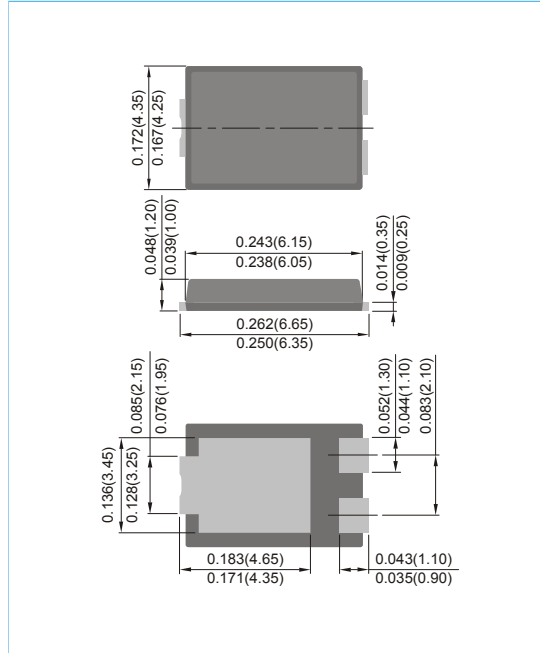
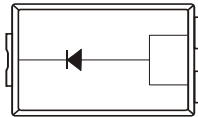
MECHANICAL DATA

Case : TO-277, Plastic

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

Weight : 0.0037 ounces, 0.1073 grams

Marking : SVM1545L



MAXIMUM RATINGS(T_A=25°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)} | 15 | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 275 | A |
| Typical Thermal Resistance (Note 1) | R _{θJC} | 6 | °C/W |
| (Note 2) | R _{θJA} | 110 | |
| Operating Junction Temperature Range And Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | °C |

NOTES :

1. Mounted on an FR4 PCB, single-sided copper, with 10*10cm*0.5mm copper pad area
2. Mounted on an 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 =1A T _A =25°C | - | 0.28 | - | V |
| | | I _F =5A T _A =25°C | - | 0.35 | - | V |
| | | I _F =15A T _A =25°C | - | 0.43 | 0.49 | V |
| | | I _F =1A T _A =125°C | - | 0.17 | - | V |
| Reverse current | I _R | V _R =36V T _A =25°C | - | 55 | - | μA |
| | | V _R =45V T _A =25°C | - | - | 320 | μA |
| | | V _R =45V T _A =125°C | - | 20 | - | mA |

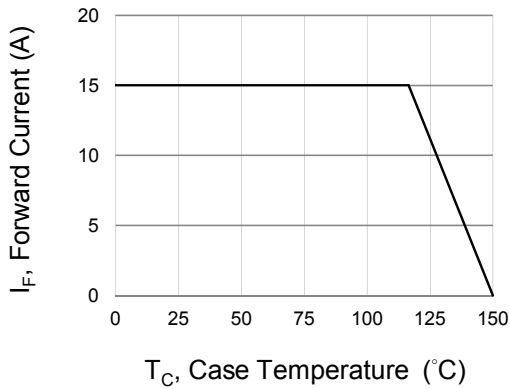


Fig.1 Forward Current Derating Curve

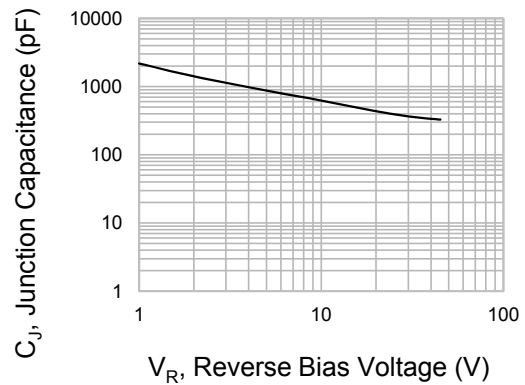


Fig.2 Typical Junction Capacitance

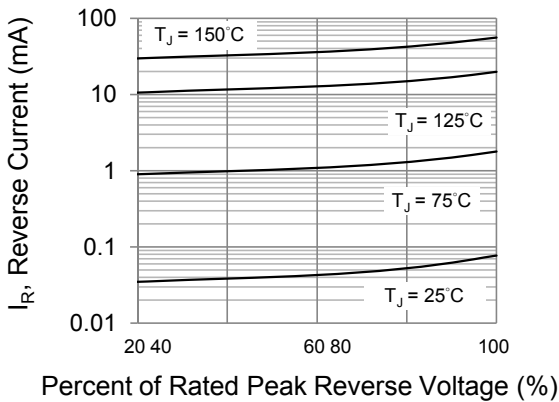


Fig.3 Typical Reverse Characteristics

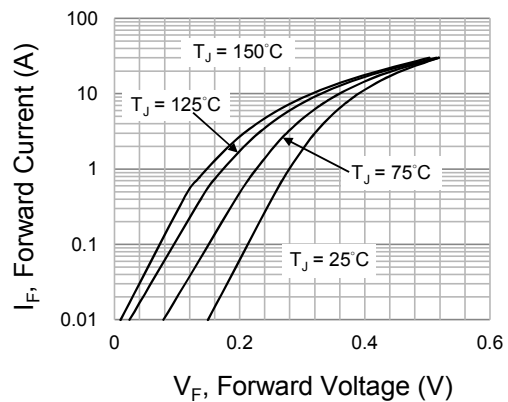


Fig.4 Typical Forward Characteristics

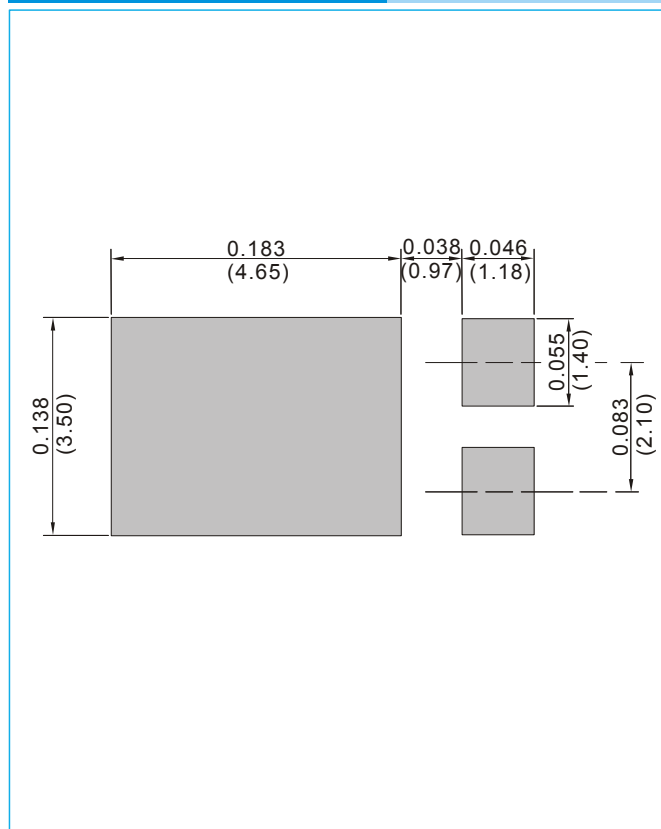


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MOUNTING PAD LAYOUT

TO-277

Unit : inch(mm)



ORDER INFORMATION

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



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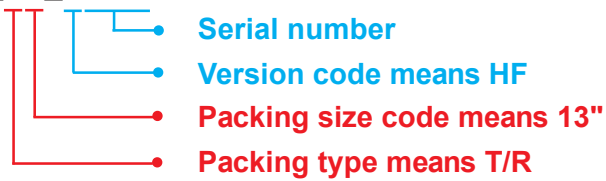
Part No_packing code_Version

SVM1545L_R2_00001

For example :

RB500V-40_R2_00001

Part No.



| 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) | 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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