



SRM84ALF

ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

Voltage

45 V

Current

8 A

Features

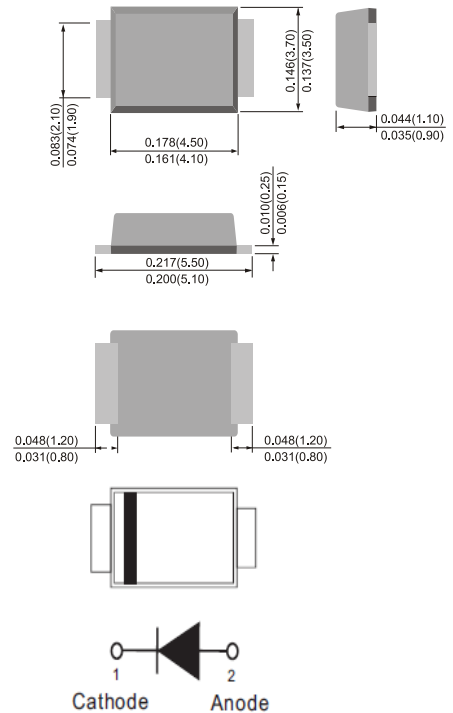
- Ideal for automated placement
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Easy pick and place package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU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

Mechanical Data

- Case: SMBF package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.002 ounces, 0.05 grams.

SMBF

Unit: inch(mm)



Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

| PARAMETER | SYMBOL | LIMIT | UNIT |
|---|---------------------------|-------------|------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 45 | V |
| Maximum rms voltage | V _{RMS} | 32 | V |
| Maximum dc blocking voltage | V _R | 45 | V |
| Maximum average forward rectified current | I _{F(AV)} | 8 | A |
| Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 150 | A |
| Typical junction capacitance (V _R =4V, f=1MHz) | C _J | 550 | pF |
| Typical thermal resistance | (Note 1) R _{θJC} | 27 | °C/W |
| | (Note 2) R _{θJA} | 135 | |
| Operating junction temperature range | T _J | -55 to +150 | °C |
| Storage temperature range | T _{STG} | -55 to +150 | °C |

Note : 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.



SRM84ALF

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITION | | MIN. | TYP. | MAX. | UNITS |
|-------------------------------|----------|--------------------|---------------------------|------|------|------|---------------|
| Breakdown voltage | V_{BR} | $I_R=0.5\text{mA}$ | $T_J=25^{\circ}\text{C}$ | 45 | - | - | V |
| Instantaneous forward voltage | V_F | $I_F=1\text{A}$ | $T_J=25^{\circ}\text{C}$ | - | 0.3 | - | V |
| | | $I_F=5\text{A}$ | | - | 0.4 | - | |
| | | $I_F=8\text{A}$ | | - | - | 0.49 | |
| | | $I_F=1\text{A}$ | $T_J=125^{\circ}\text{C}$ | - | 0.21 | - | V |
| $I_F=5\text{A}$ | - | 0.35 | | - | | | |
| Reverse current | I_R | $V_R=36\text{V}$ | $T_J=25^{\circ}\text{C}$ | - | 70 | - | μA |
| | | $V_R=45\text{V}$ | $T_J=25^{\circ}\text{C}$ | - | - | 210 | μA |
| | | | $T_J=125^{\circ}\text{C}$ | - | 19 | - | mA |



SRM84ALF

TYPICAL CHARACTERISTIC CURVES

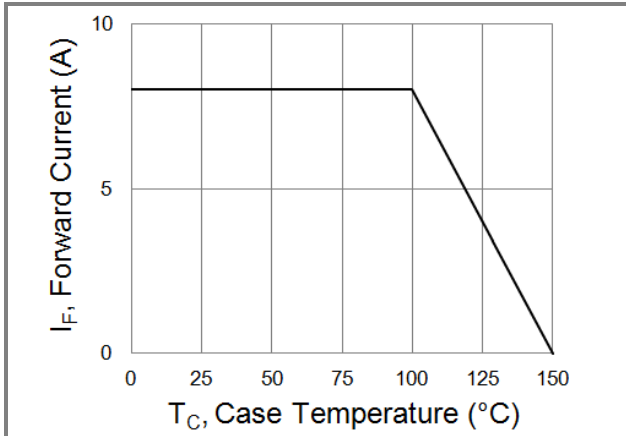


Fig.1 Forward Current Derating Curve

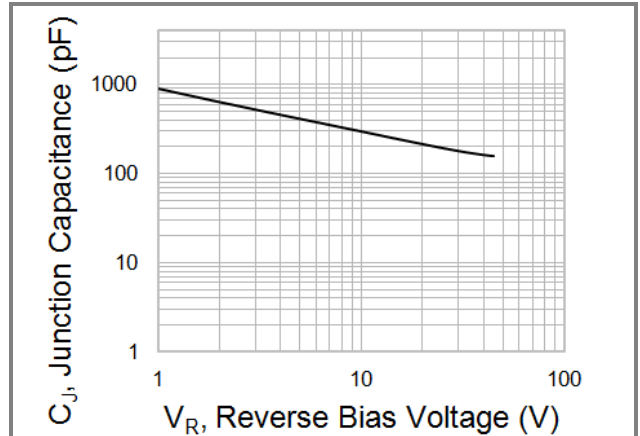


Fig.2 Typical Junction Capacitance

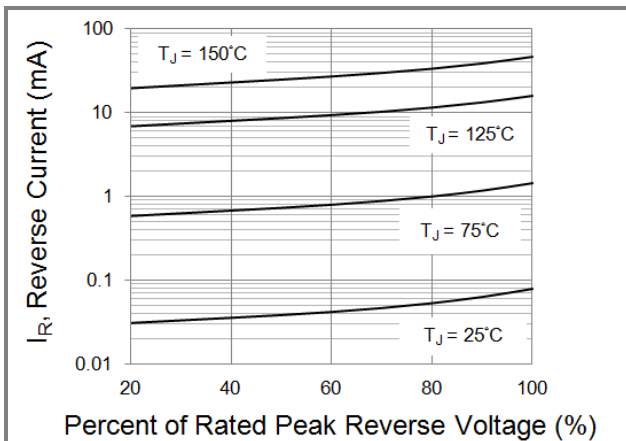


Fig.3 Typical Reverse Characteristics

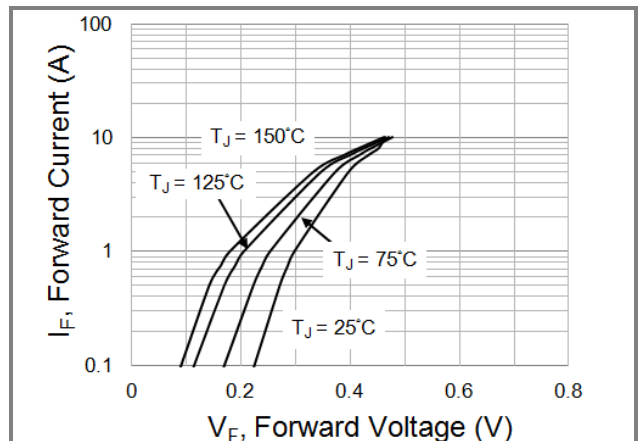


Fig.4 Typical Forward Characteristics

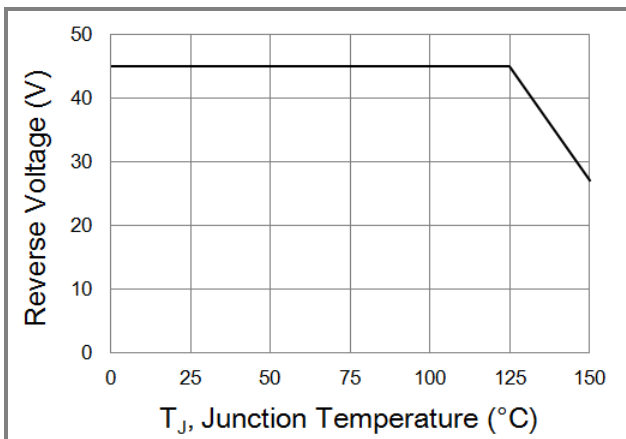


Fig.5 Operating Temperature Derating Curve

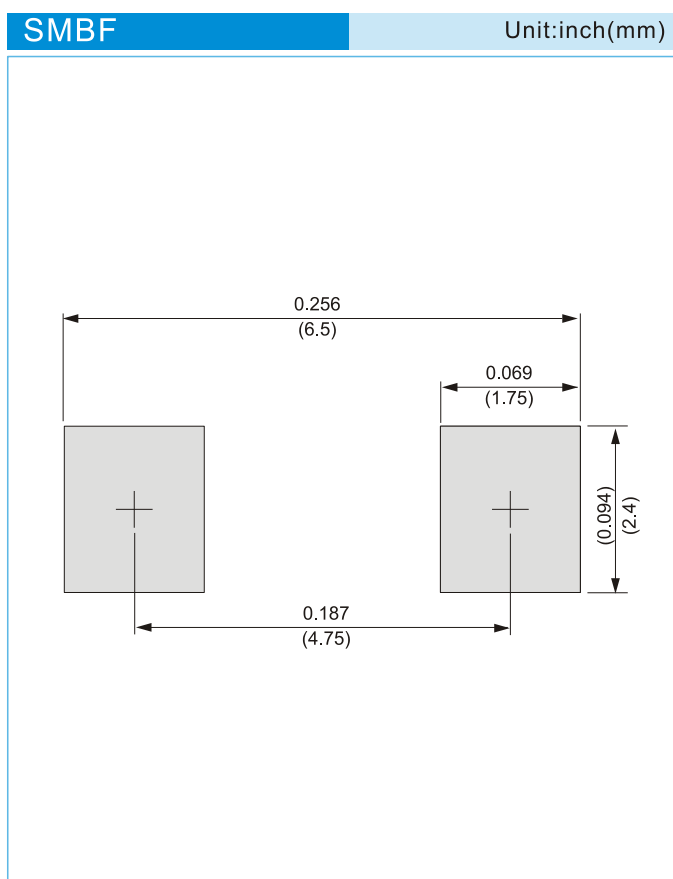


SRM84ALF

Part No Packing Code Version

| Part No Packing Code | Package Type | Packing Type | Marking | Version |
|----------------------|--------------|--------------------|----------|--------------|
| SRM84ALF_R1_00001 | SMBF | 1.5K pcs / 7" reel | SRM84ALF | Halogen free |
| SRM84ALF_R2_00001 | SMBF | 5K pcs / 13" reel | SRM84ALF | Halogen free |

Mounting Pad Layout





SRM84ALF

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Panjit\(强茂\)](#)