



ERT2AF SERIES

SURFACE MOUNT SUPERFAST RECTIFIER

VOLTAGE 50~400 Volt **CURRENT** 2 Ampere

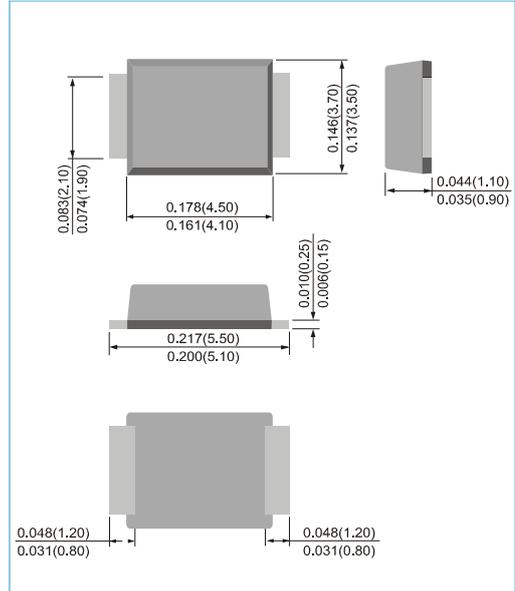
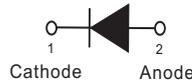
SMBF Unit : inch(mm)

FEATURES

- For surface mounted applications in order to optimize board space
- High temperature metallurgically bonded-no compression
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated junction
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SMBF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity: Color band denotes cathode end



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

| PARAMETER | SYMBOL | ERT2AF | ERT2BF | ERT2CF | ERT2DF | ERT2EF | ERT2GF | UNITS |
|---|--------------------------------------|-------------|--------|--------|--------|--------|--------|--------|
| Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | V |
| RMS Voltage | V _{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | V |
| DC Blocking Voltage | V _R | 50 | 100 | 150 | 200 | 300 | 400 | V |
| Average Forward Current | I _{F(AV)} | 2 | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 50 | | | | | | A |
| Forward Voltage at 2A | V _F | 0.95 | | | | 1.25 | | V |
| DC Reverse Current at Rated DC Blocking Voltage T _J =25°C | I _R | 1 | | | | | | μA |
| Typical Junction Capacitance (Note 1) | C _J | 35 | | | | 25 | | pF |
| Typical Thermal Resistance ,Junction to Lead (Note 3) Junction to Ambient (Note 4) | R _{θJL} R _{θJA} | 20 135 | | | | | | °C / W |
| Reverse Recovery Time (Note 2) | T _{rr} | 25 | | | | | | ns |
| Operating Junction Temperature and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | | | °C |

- NOTES:1. Measured at 1 MHz and Applied Reverse Voltage of 4 Volt.
 2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Recover to 0.25A.
 3. Mounted on a FR4 PCB, single-sided copper, with 10cm*10cm copper pad area
 4. Mounted on a FR4 PCB, single-sided copper, mini pad.



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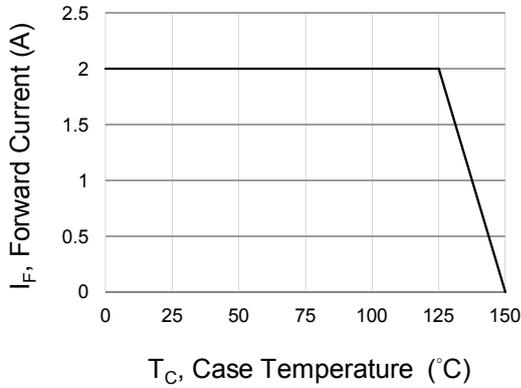


Fig.1 Forward Current Derating Curve

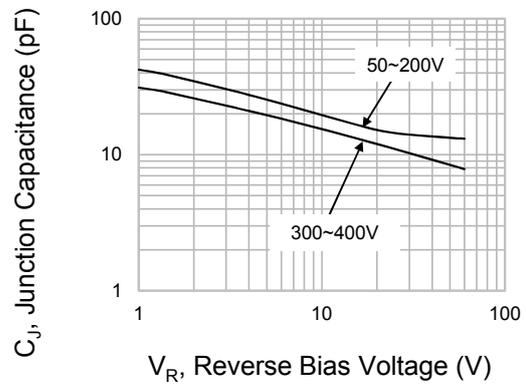


Fig.2 Typical Junction Capacitance

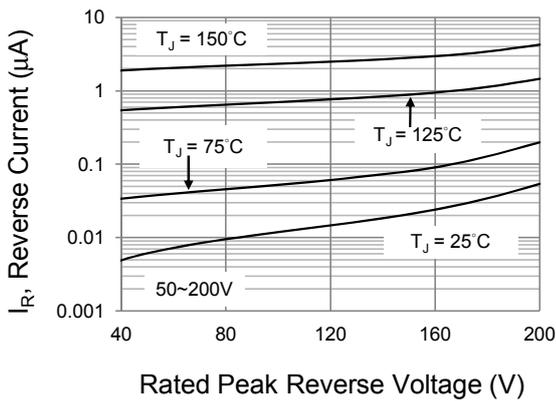


Fig.3 Typical Reverse Characteristics

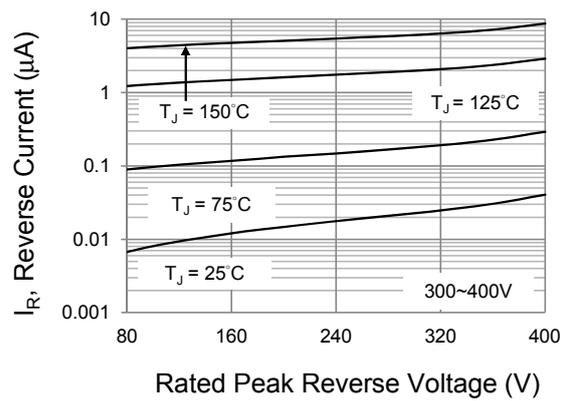


Fig.4 Typical Reverse Characteristics

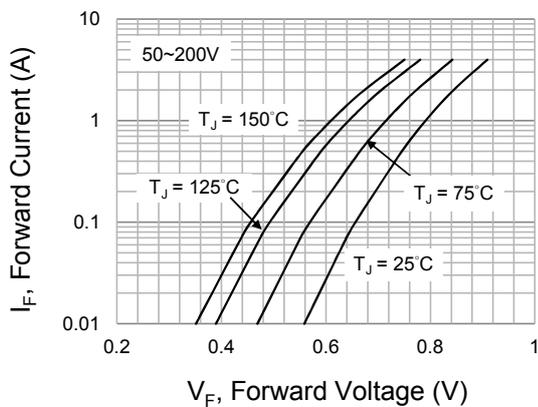


Fig.5 Typical Forward Characteristics

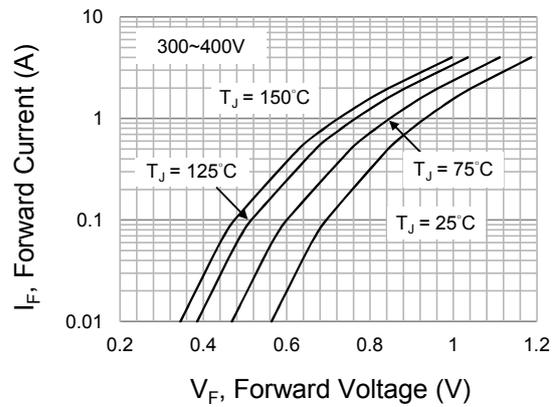
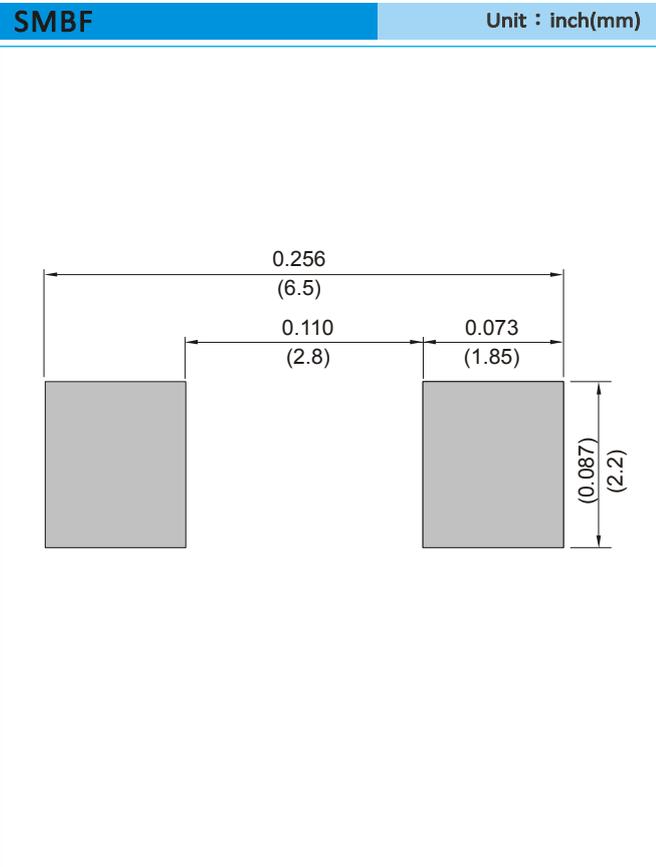


Fig.6 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

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



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Part No_packing code_Version

ERT2AF_R2_00001

For example :

RB500V-40_R2_00001



| 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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