

ERT2AF SERIES

SURFACE MOUNT SUPERFAST RECTIFIER

VOLTAGE 50~600 Volt **CURRENT** 2 Ampere

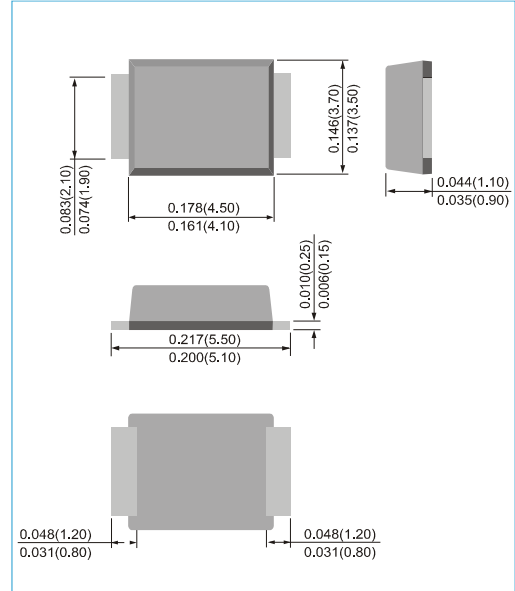
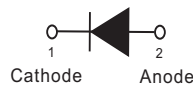
SMBF Unit : inch(mm)

FEATURES

- For surface mounted applications in order to optimize board space
- High temperature metallurgically bonded-no compression
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ultra thin profile package for space constrained utilization
- Easy pick and place package suitable for automated handling
- Glass passivated junction with epi wafer
- Hyperfast recovery time
- Lead free in compliance with EU RoHS 2011/65/EU directive
- 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 | ERT2JF | UNITS |
|---|--------------------------------------|-------------|--------|--------|--------|--------|--------|--------|--------|
| Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | 600 | V |
| RMS Voltage | V _{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | 420 | V |
| DC Blocking Voltage | V _R | 50 | 100 | 150 | 200 | 300 | 400 | 600 | 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 | | 1.7 | 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 | | 15 | 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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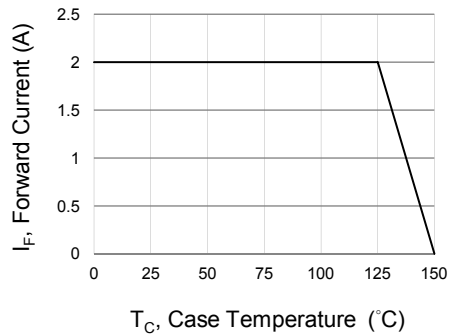


Fig.1 Forward Current Derating Curve

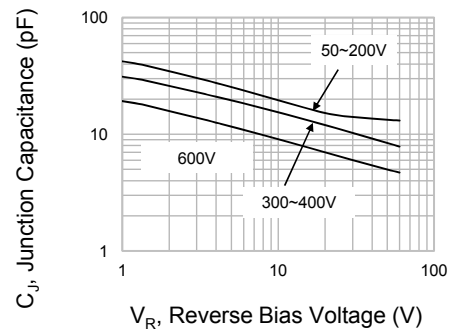


Fig.2 Typical Junction Capacitance

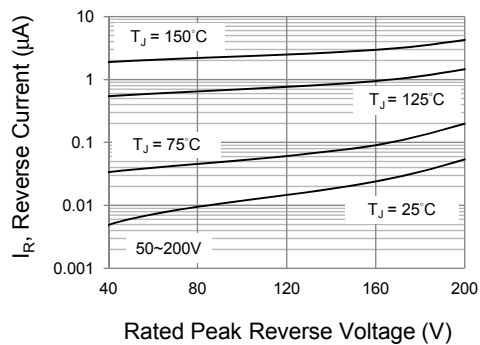


Fig.3 Typical Reverse Characteristics

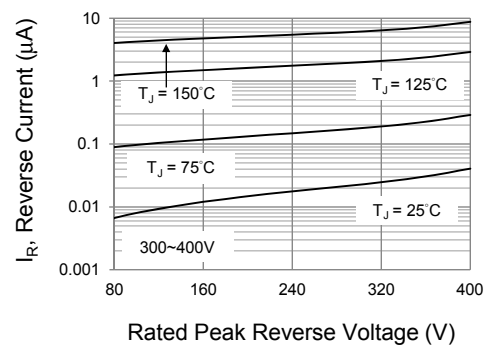


Fig.4 Typical Reverse Characteristics

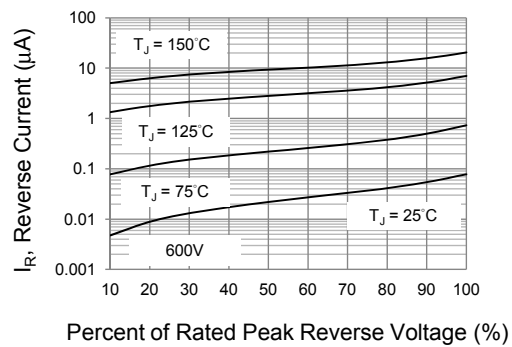


Fig.5 Typical Reverse Characteristics

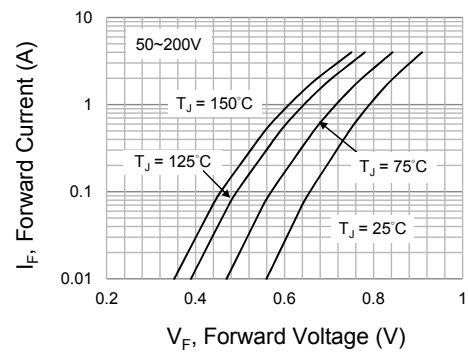


Fig.6 Typical Forward Characteristics

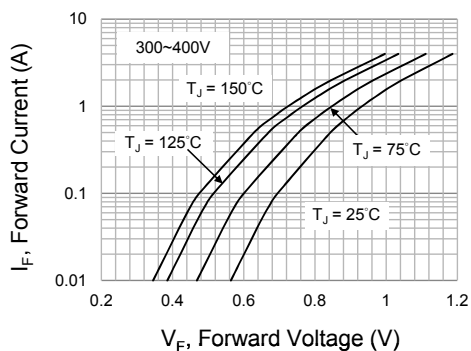


Fig.7 Typical Forward Characteristics

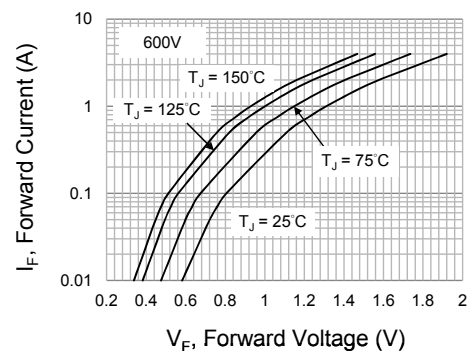


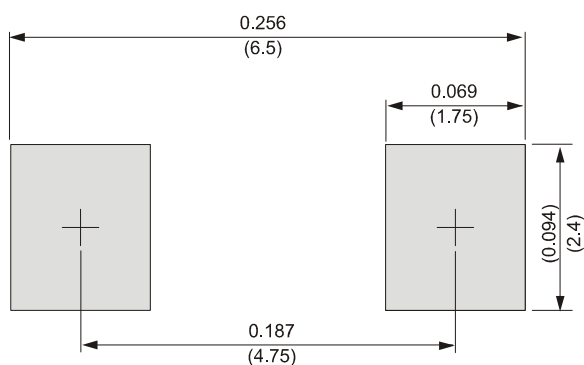
Fig.8 Typical Forward Characteristics

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MOUNTING PAD LAYOUT

SMBF

Unit:inch(mm)



ORDER INFORMATION

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

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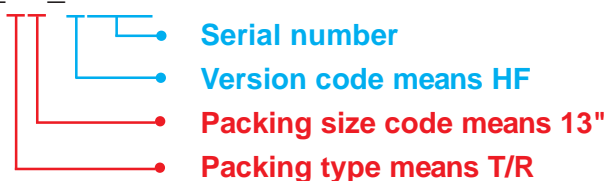
Part No_packing code_Version

ERT2AF_R2_00001

For example :

RB500V-40_R2_00001

Part No.



| Packing Code XX | | | | Version Code XXXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|----------------------------|----------------------|---------------------------------------|
| 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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