



EST2AF SERIES

SUPERFAST RECOVERY RECTIFIERS

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

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Flame Retardant Epoxy Molding Compound
- Exceeds environmental standard MIL-S-19500/228
- Super fast recovery time, high voltage
- 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 : SMAF Molded Plastic

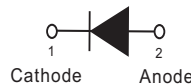
Terminals : Solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

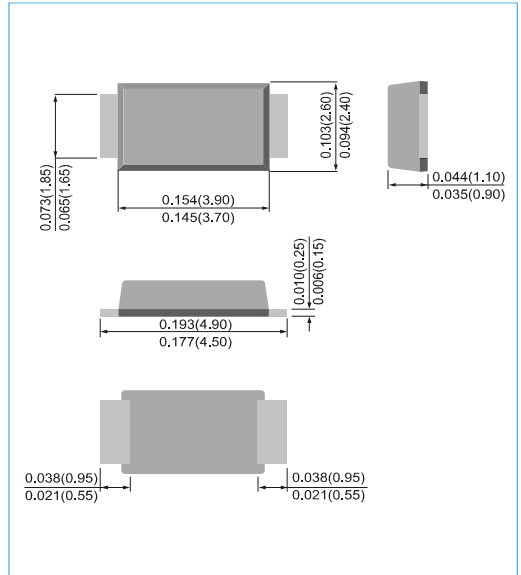
Standard packaging : 12mm tape (EIA-481)

Weight : 0.0011 ounces, 0.0328 grams

Marking : Part number



SMAF Unit : inch(mm)



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

| PARAMETER | SYMBOL | EST2AF | EST2BF | EST2CF | EST2DF | EST2EF | EST2GF | UNIT |
|---|--------------------------------------|--------------|--------|--------|--------|--------|--------|------|
| Maximum recurrent peak reverse voltage | V _{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | V |
| Maximum rms voltage | V _{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | V |
| Maximum dc blocking voltage | V _R | 50 | 100 | 150 | 200 | 300 | 400 | V |
| Maximum average forward rectified current | I _{F(AV)} | 2 | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 50 | | | | | | A |
| Maximum forward voltage at 2A | V _F | 0.95 | | | | 1.25 | | V |
| Maximum dc reverse current | I _R | 1 | | | | | | μA |
| Typical junction capacitance (Note 1) | C _J | 30 | | | | 25 | | pF |
| Typical thermal resistance (Note 3) (Note 4) | R _{θJL} R _{θJA} | 20 150 | | | | | | °C/W |
| Maximum reverse recovery time (Note 2) | T _{RR} | 25 | | | | | | nS |
| Operating junction temperature range | T _J | -55 to + 150 | | | | | | °C |
| Storage temperature range | T _{STG} | -55 to + 150 | | | | | | °C |

Note:1.Measured at 1 MHz and Applied Reverse Voltage of 4 Volts.

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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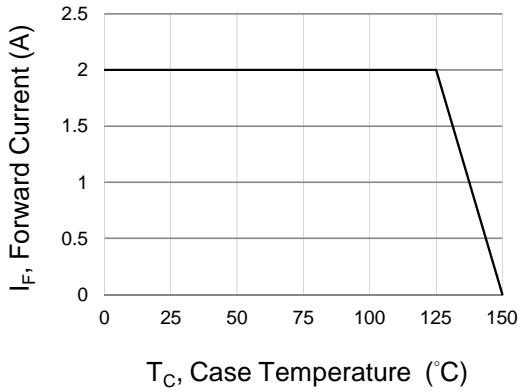


Fig.1 Forward Current Derating Curve

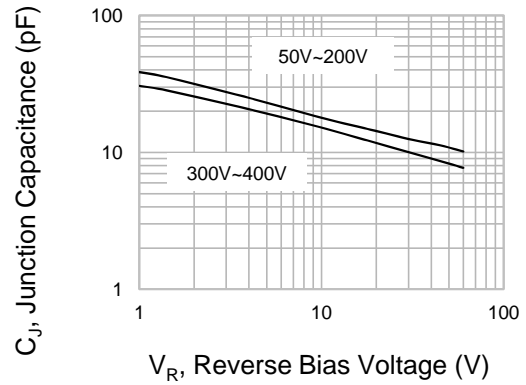


Fig.2 Typical Junction Capacitance

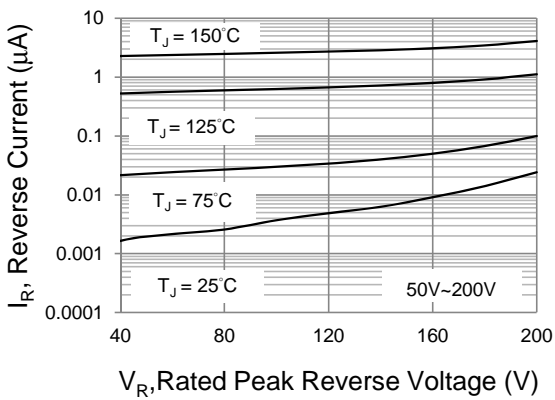


Fig.3 Typical Reverse Characteristics

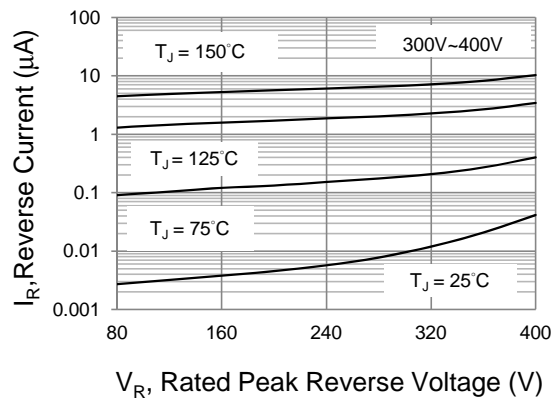


Fig.4 Typical Reverse Characteristics

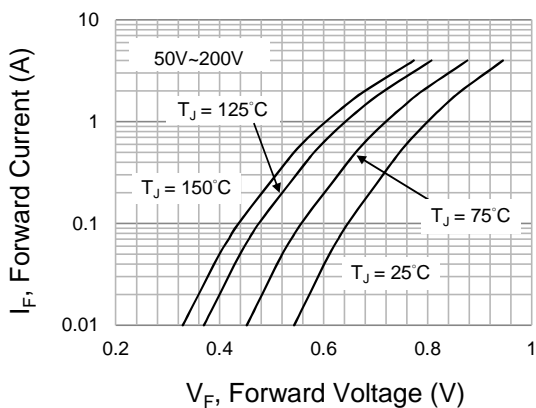


Fig.5 Typical Forward Characteristics

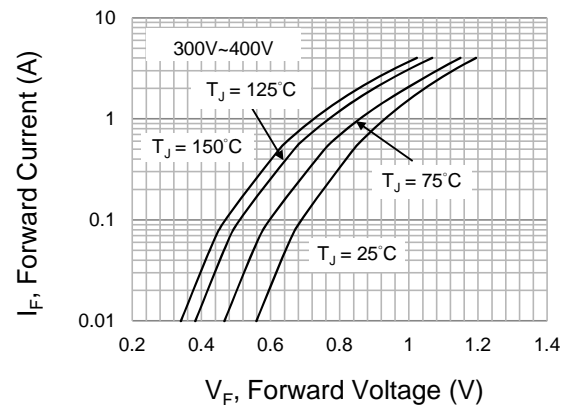
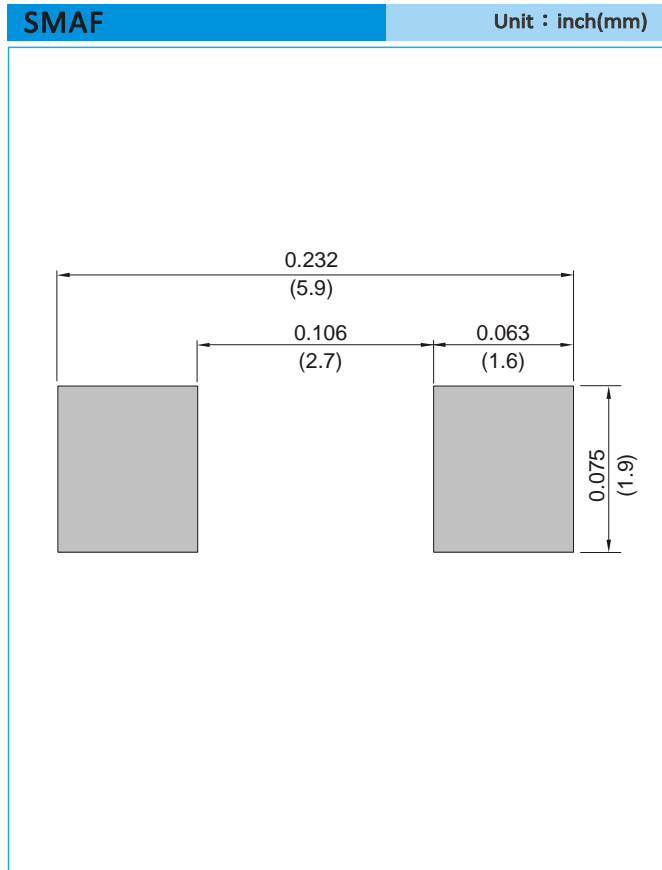


Fig.6 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



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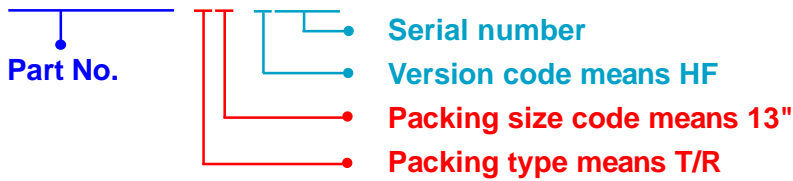
Part No_packing code_Version

EST2AF_R1_00001

EST2AF_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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