

Surface Mount Super Fast Recovery Rectifiers

V_{RRM}

300~400V

I_F

3 A

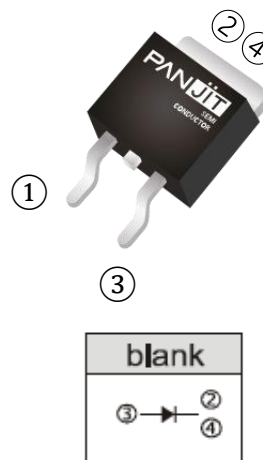
Features

- Superfast recovery times-epitaxial.
- Low forward voltage , high current capability.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: TO-252AA molded plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.3217 grams

TO-252AA



Maximum Ratings and Thermal Characteristics ($T_C = 25^\circ\text{C}$ unless otherwise specified)

| PARAMETER | | SYMBOL | ED303D | ED304D | UNITS |
|--|------------------------|--------------------|---------|--------|-------|
| Maximum Repetitive Peak Reverse Voltage | | V _{RRM} | 300 | 400 | V |
| Maximum RMS voltage | | V _{RMS} | 210 | 280 | V |
| Maximum DC Blocking Voltage | | V _{DC} | 300 | 400 | V |
| Maximum Average Forward Rectified Current | | I _{F(AV)} | 3 | | A |
| Peak Forward Surge Current <i>t_p = 8.3 ms, single half sine-wave</i> | | I _{FSM} | 75 | | A |
| Maximum Forward voltage at 3A per diode (Note 1) | | V _F | 1.25 | | V |
| Maximum DC Reverse Current | T _J =25 °C | I _R | 1 | | μA |
| At Rated DC Blocking Voltage | T _J =125 °C | | 300 | | |
| Maximum Reverse Recovery Time (Note 2) | | T _{RR} | 35 | | nS |
| Typical Thermal Resistance | | R _{θJA} | 25 | | °C/W |
| | | R _{θJL} | 8 | | |
| | | R _{θJC} | 10 | | |
| Operating Junction and Storage Temperature Range | | T _{STG} | -55~150 | | °C |

NOTES :

1. Pulse Test with $PW = 300\text{ }\mu\text{sec}$, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$

TYPICAL CHARACTERISTIC CURVES

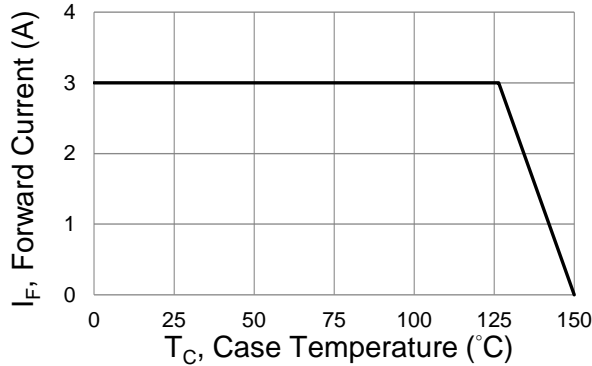


Fig.1 Forward Current Derating Curve

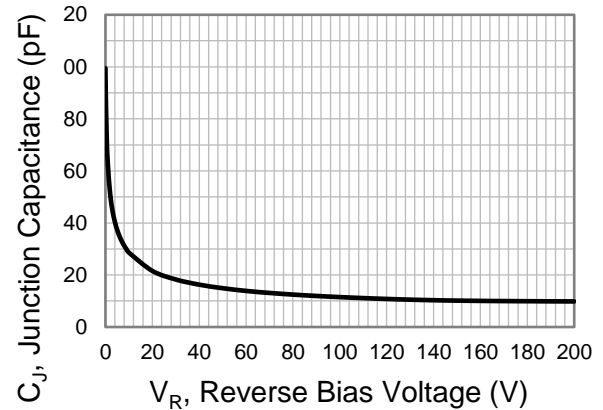


Fig.2 Typical Junction Capacitance

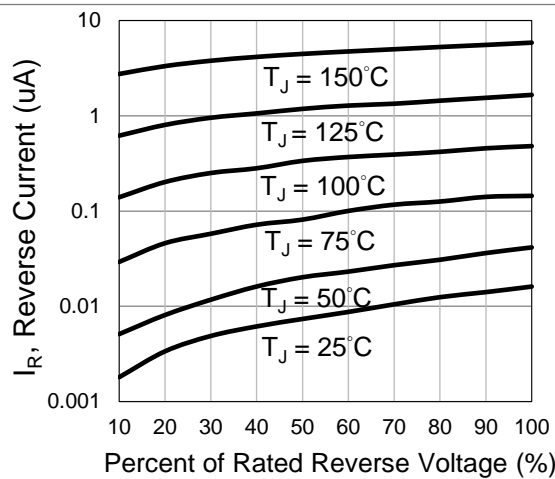


Fig.3 Typical Reverse Characteristics

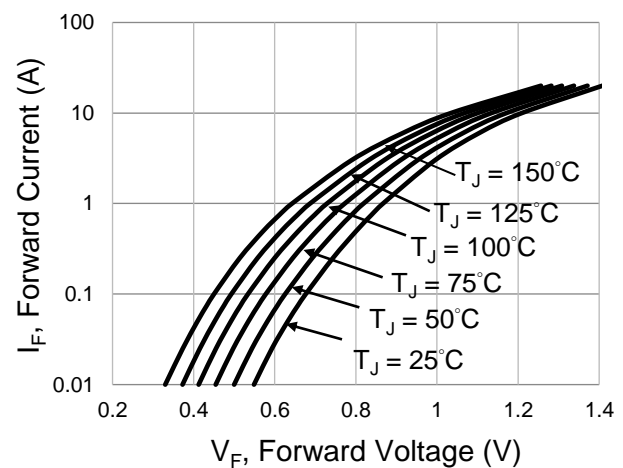
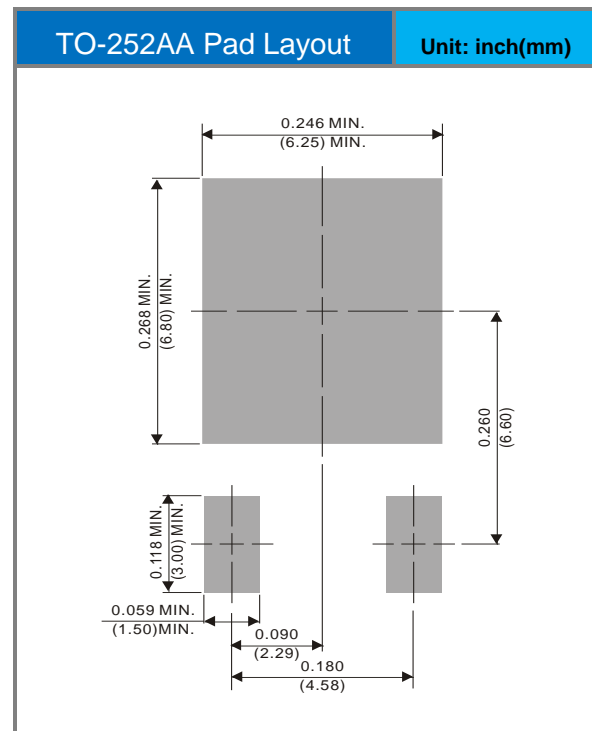
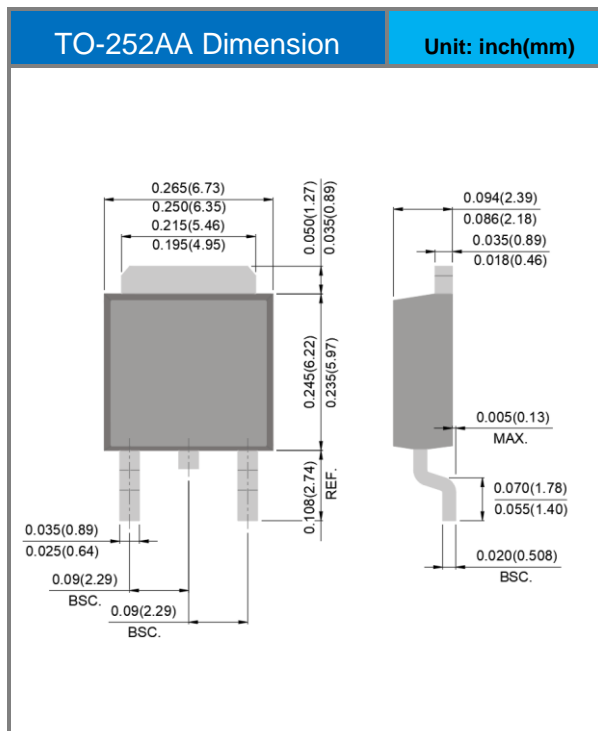


Fig.4 Typical Forward Characteristics

Product and Packing Information

| Part No. | Package Type | Packing Type | Marking |
|----------|--------------|----------------------|---------|
| ED303D | TO-252AA | 3,000 pcs / 13" reel | ED303D |
| ED304D | TO-252AA | 3,000 pcs / 13" reel | ED304D |

Packaging Information & Mounting Pad Layout



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