



General Purpose Plastic Rectifier



DO-201AD

FEATURES

- Low forward voltage drop
- Low leakage current, I_R less than 0.1 μ A
- High forward surge capability
- Solder dip 275 °C max. 10 s, per JESD 22-B106
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT

TYPICAL APPLICATIONS

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes application.

Note

- These devices are not AEC-Q101 qualified.

MECHANICAL DATA

Case: DO-201AD, molded epoxy body
Molding compound meets UL 94 V-0 flammability rating
Base P/N-E3 - RoHS-compliant, commercial grade

Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

E3 suffix meets JESD 201 class 1A whisker test

Polarity: Color band denotes cathode end

Table with 2 columns: Parameter and Value. Includes I_F(AV), V_RRM, I_FSM, I_R, V_F, T_J max., Package, Diode variations.

Table with 8 columns: Parameter, Symbol, BY251P, BY252P, BY253P, BY254P, BY255P, Unit. Title: MAXIMUM RATINGS (T_A = 25 °C unless otherwise noted)

Table with 8 columns: Parameter, Test Conditions, Symbol, BY251P, BY252P, BY253P, BY254P, BY255P, Unit. Title: ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)



| THERMAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted) | | | | | | | |
|---|--------------------------------|--------|--------|--------|--------|--------|--------------------|
| PARAMETER | SYMBOL | BY251P | BY252P | BY253P | BY254P | BY255P | UNIT |
| Typical thermal resistance | $R_{\theta JA}$ ⁽¹⁾ | 20 | | | | | $^\circ\text{C/W}$ |
| | $R_{\theta JL}$ ⁽¹⁾ | 10 | | | | | |

Note

(1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length, PCB mounted

| ORDERING INFORMATION (Example) | | | | |
|---------------------------------------|-----------------|------------------------|---------------|----------------------------------|
| PREFERRED P/N | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE |
| BY253P-E3/54 | 1.1 | 54 | 1400 | 13" diameter paper tape and reel |
| BY253P-E3/73 | 1.1 | 73 | 1000 | Ammo pack packaging |

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

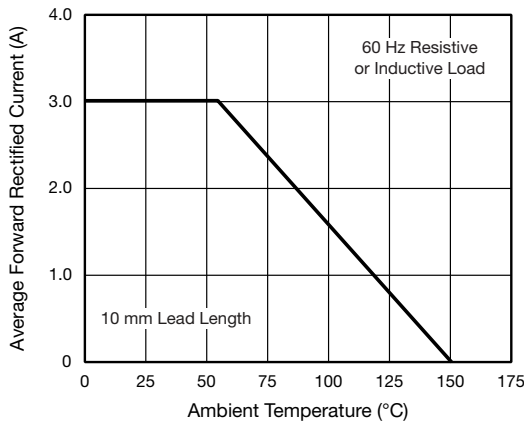


Fig. 1 - Forward Current Derating Curve

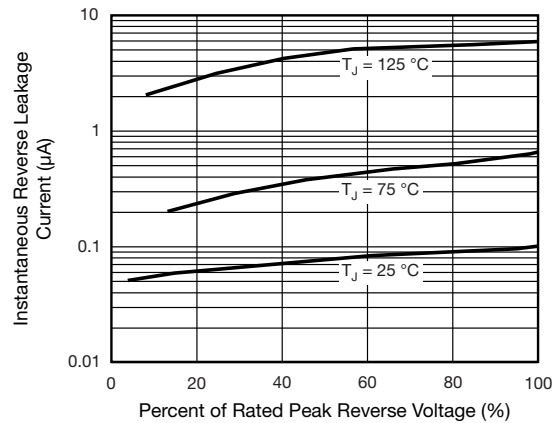


Fig. 3 - Maximum Non-repetitive Peak Forward Surge Current

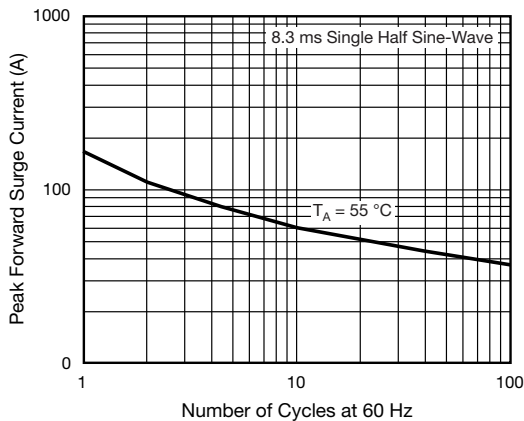


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

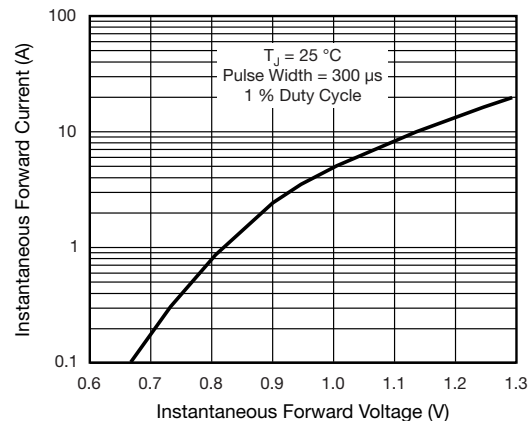


Fig. 4 - Typical Instantaneous Forward Characteristics

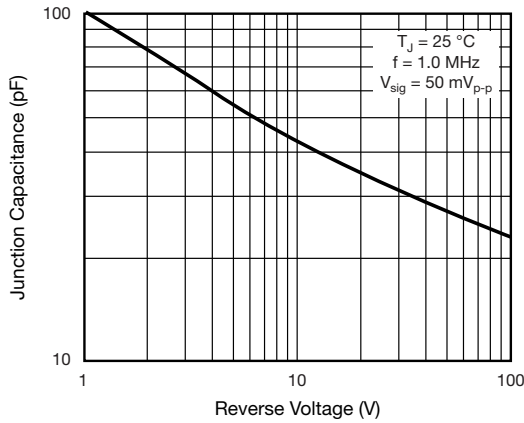
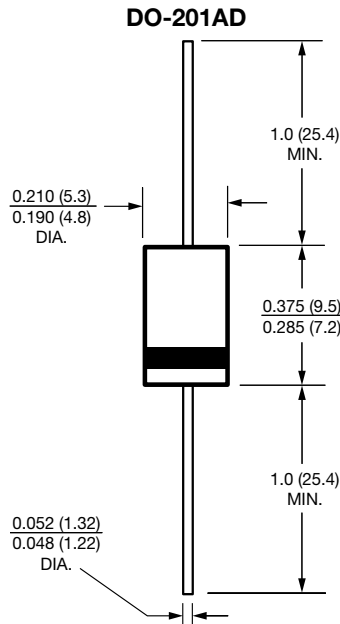


Fig. 5 - Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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