



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 primary characteristics like IF(AV), VRRM, IFSM, IR, VF, TJ max., Package, and Diode variations.

Table with 8 columns: Parameter, Symbol, BY251P, BY252P, BY253P, BY254P, BY255P, Unit. Contains maximum ratings for various parameters like VRRM, VRMS, VDC, IF(AV), IFSM, IR(AV), and temperature range.

Table with 8 columns: Parameter, Test Conditions, Symbol, BY251P, BY252P, BY253P, BY254P, BY255P, Unit. Contains electrical characteristics like forward voltage, reverse current, recovery time, and junction capacitance.



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)

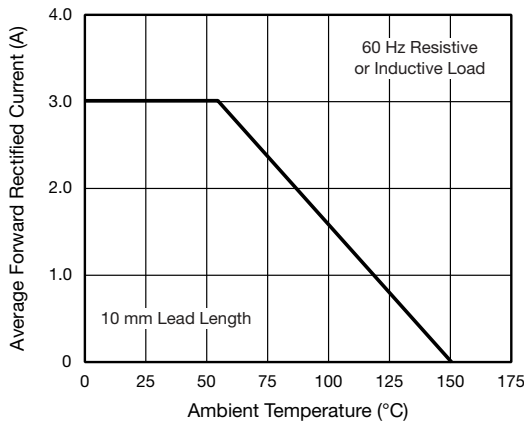


Fig. 1 - Forward Current Derating Curve

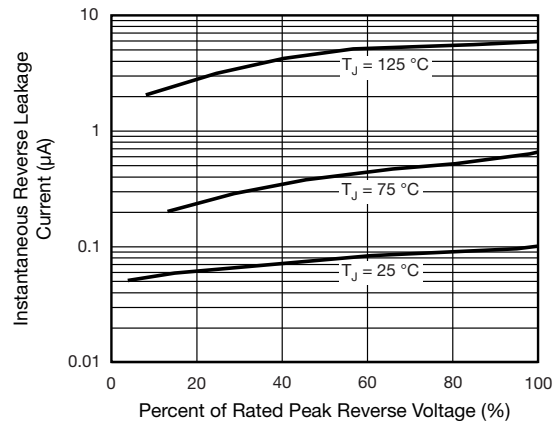


Fig. 3 - Maximum Non-repetitive Peak Forward Surge Current

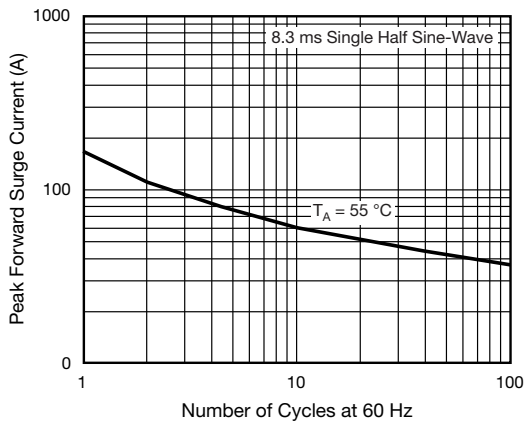


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

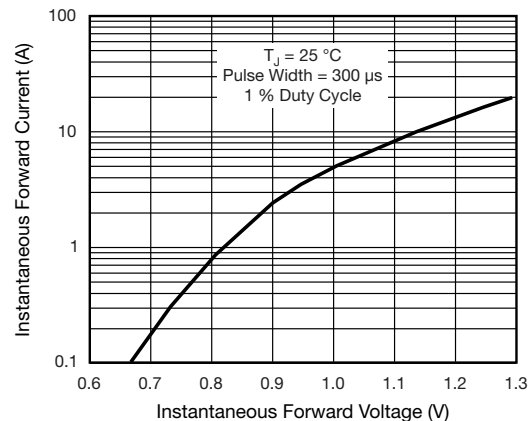


Fig. 4 - Typical Instantaneous Forward Characteristics

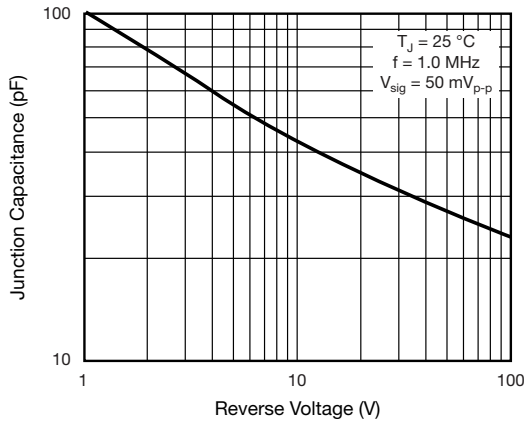
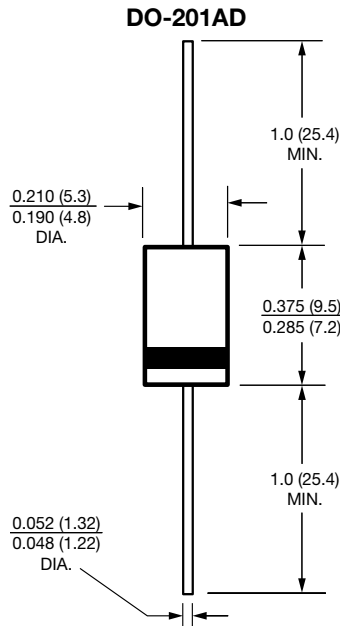


Fig. 5 - Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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