

## BY251 THRU BY255 GENERAL PURPOSE SILICON RECTIFIER

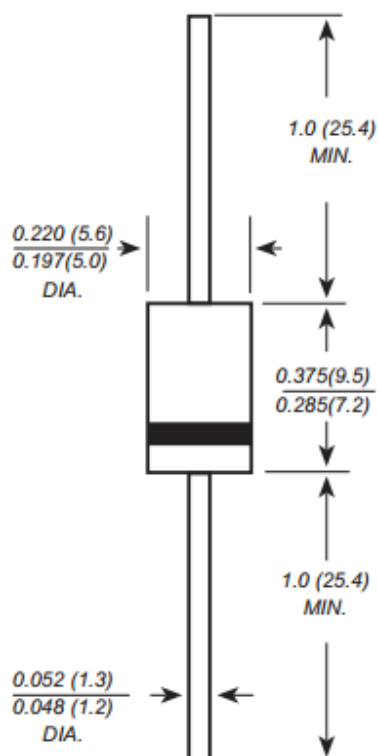
Reverse Voltage - 200 to 1300 Volts Forward Current - 3.0 Ampere

**FEATURES**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

**MECHANICAL DATA**

- Case: DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.04 ounce, 1.10 grams

**MECHANICAL DIMENSIONS: In Inches/mm**


**DO-201AD**

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**MARKING DIAGRAM**


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**Cautions:** Molding resin  
Epoxy resin UL:94V-0

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**ORDERING INFORMATION**


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Device	Package	Shipping
BY251-BY255	DO-201AD (Pb-Free)	1250pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

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**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

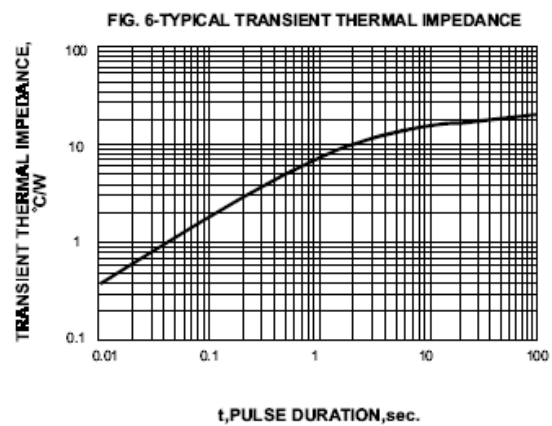
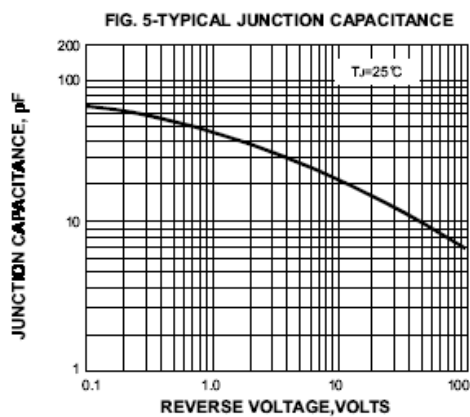
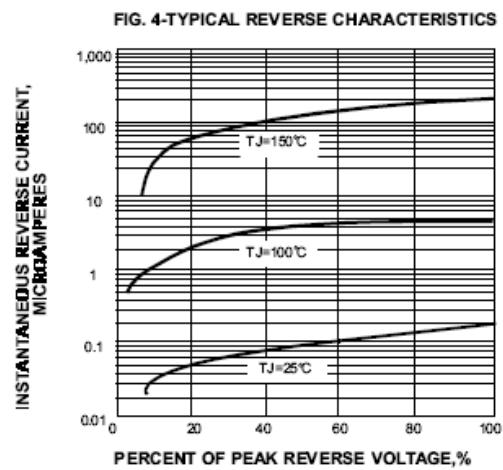
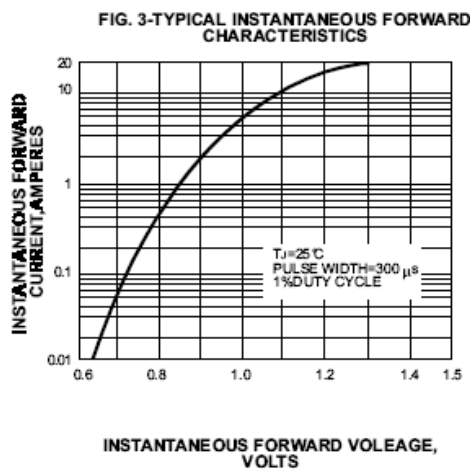
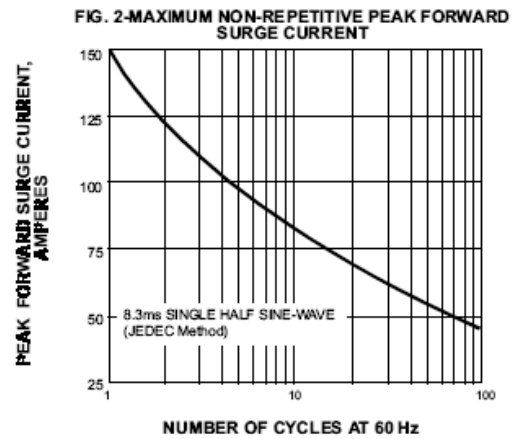
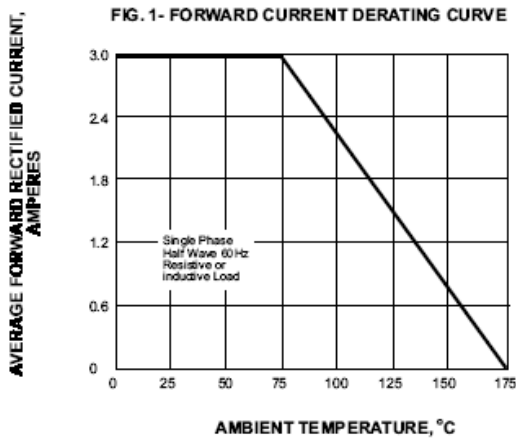

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Ratings at 25 C ambient temperature unless otherwise specified.  
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	BY251	BY252	BY253	BY254	BY255	Unit
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	$V_{RRM}$ $V_{DC}$	200	400	600	800	1300	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	910	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at @ $T_A = 75^\circ C$	$I_{(AV)}$	3.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150					A
Maximum instantaneous forward voltage at 3.0A	$V_F$	1.1					V
Maximum DC reverse current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 100^\circ C$	$I_R$	10.0 500					$\mu A$
Typical Junction Capacitance (Note 1)	$C_J$	30.0					pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20.0					$^\circ C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +175					$^\circ C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

**RATINGS AND CHARACTERISTIC CURVES BY251 THRU BY255**





**BY251-BY255**

**Technical Data**  
**Data Sheet N0552, Rev. A**

***Green Products***

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