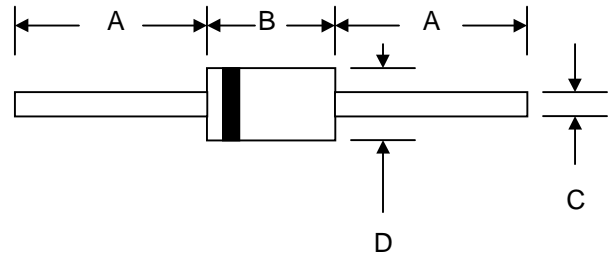


## Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



## Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

| DO-201AD             |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | 25.4 | —    |
| B                    | 7.20 | 9.50 |
| C                    | 1.20 | 1.30 |
| D                    | 4.80 | 5.30 |
| All Dimensions in mm |      |      |

## Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| Characteristic   | Symbol       | UF          | UF    | UF    | UF    | UF    | UF    | UF    | UF    | Unit             |    |
|--|--------------|-------------|-------|-------|-------|-------|-------|-------|-------|------------------|----|
|  |              | 5400G       | 5401G | 5402G | 5403G | 5404G | 5406G | 5407G | 5408G |                  |    |
| Peak Repetitive Reverse Voltage  | $V_{RRM}$    | 50          | 100   | 200   | 300   | 400   | 600   | 800   | 1000  | V                |    |
| Working Peak Reverse Voltage   | $V_{RWM}$    |             |       |       |       |       |       |       |       |                  |    |
| DC Blocking Voltage  | $V_R$        |             |       |       |       |       |       |       |       |                  |    |
| RMS Reverse Voltage  | $V_{R(RMS)}$ | 35          | 70    | 140   | 210   | 280   | 420   | 560   | 700   | V                |    |
| Average Rectified Output Current (Note 1)  | $I_O$        | 3.0         |       |       |       |       |       |       |       | A                |    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$    | 150         |       |       |       |       |       |       |       | A                |    |
| Forward Voltage @ $I_F = 3.0\text{A}$  | $V_{FM}$     | 1.0         |       |       | 1.3   |       | 1.7   |       |       | V                |    |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$        | $I_{RM}$     | 10<br>100   |       |       |       |       |       |       |       | $\mu\text{A}$    |    |
| Reverse Recovery Time (Note 2)   | $t_{rr}$     | 50          |       |       |       |       | 75    |       |       |                  | nS |
| Typical Junction Capacitance (Note 3)  | $C_j$        | 80          |       |       |       |       | 50    |       |       |                  | pF |
| Operating Temperature Range  | $T_j$        | -65 to +150 |       |       |       |       |       |       |       | $^\circ\text{C}$ |    |
| Storage Temperature Range  | $T_{STG}$    | -65 to +150 |       |       |       |       |       |       |       | $^\circ\text{C}$ |    |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
2. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $IRR = 0.25\text{A}$ . See figure 5.  
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

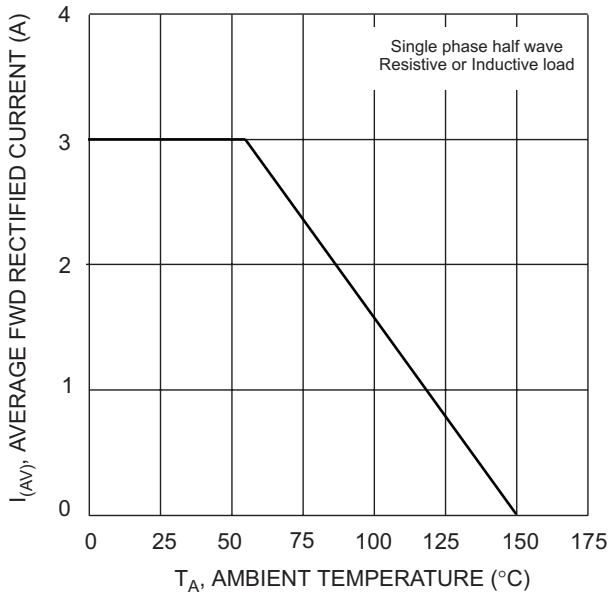


Fig. 1 Forward Current Derating Curve

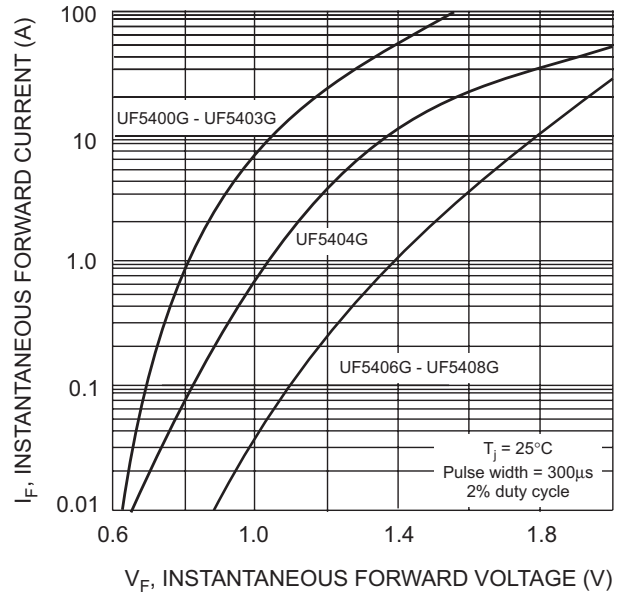


Fig. 2 Typical Forward Characteristics

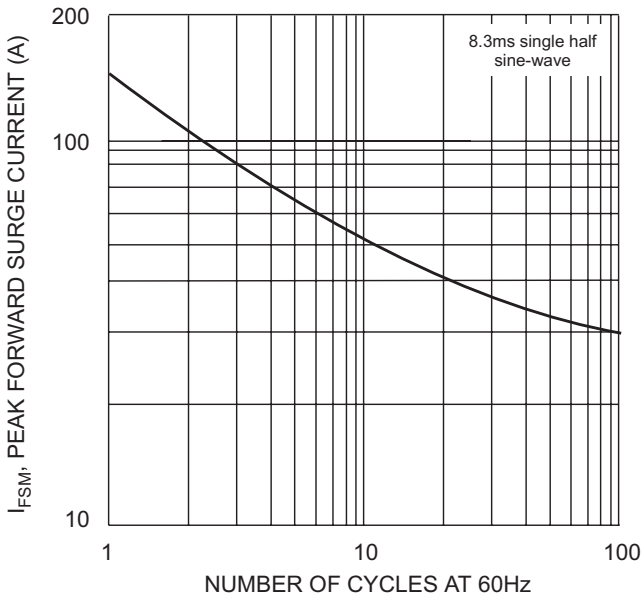


Fig. 3 Peak Forward Surge Current

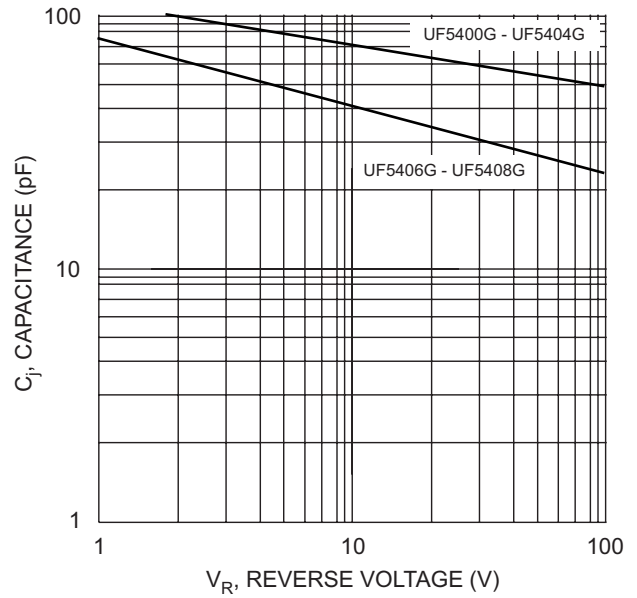
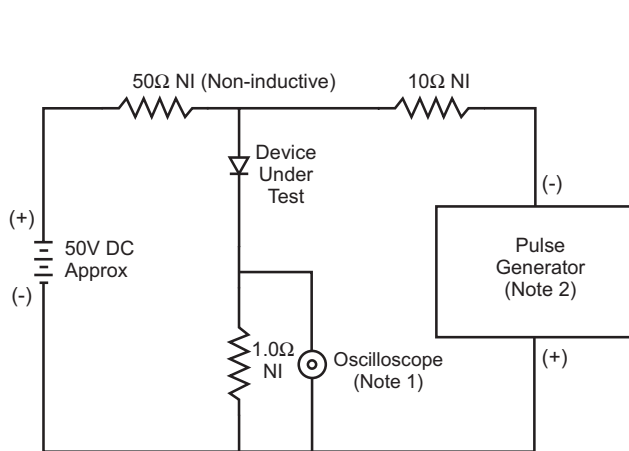
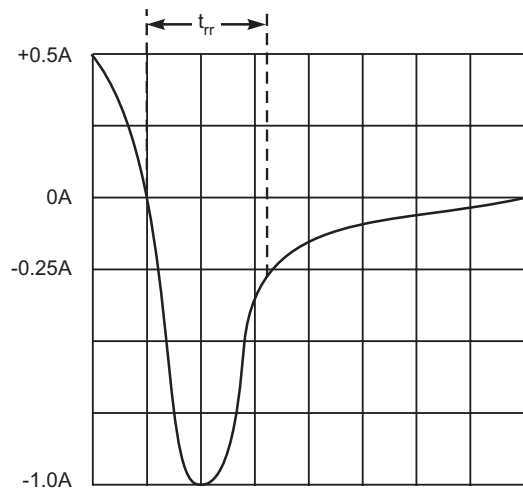


Fig. 4 Typical Junction Capacitance



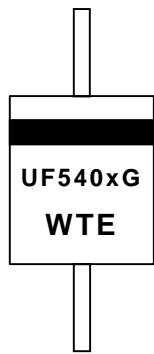
- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
  2. Rise Time = 10ns max. Input Impedance = 50Ω.



Set time base for 5/10ns/cm

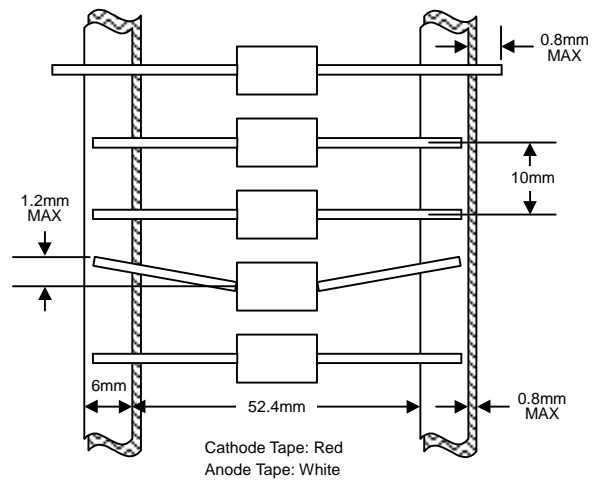
Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

## MARKING INFORMATION

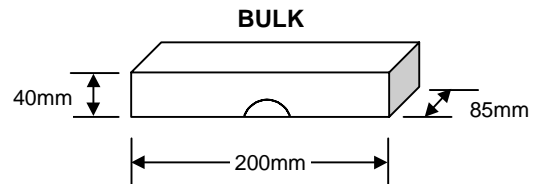
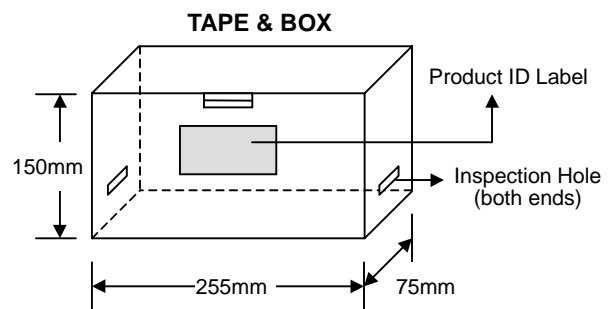


Cathode = Polarity Band  
 UF540xG = Device Number  
 x = 0, 1, 2, 3, 4, 6, 7 or 8  
 WTE = Manufacturer's Logo

## TAPING SPECIFICATIONS



## PACKAGING INFORMATION



| Packaging              | Reel Diameter / Box Size (mm) | Quantity (PCS) | Carton Size (mm) | Quantity (PCS) | Approx. Gross Weight (KG) |
|------------------------|-------------------------------|----------------|------------------|----------------|---------------------------|
| <b>TAPE &amp; REEL</b> | 330                           | 1,200          | 370 x 370 x 420  | 6,000          | 10.0                      |
| <b>TAPE &amp; BOX</b>  | 255 x 75 x 150                | 1,200          | 400 x 273 x 415  | 12,000         | 17.0                      |
| <b>BULK</b>            | 200 x 85 x 40                 | 500            | 459 x 214 x 256  | 12,500         | 16.0                      |

**Note:** 1. Paper reel, white or gray color. Core material: plastic or metal.  
 2. Components are packed in accordance with EIA standard RS-296-E.

## ORDERING INFORMATION

| Product No.       | Package Type | Shipping Quantity |
|-------------------|--------------|-------------------|
| UF5400G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5400G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5400G           | DO-201AD     | 500 Units/Box     |
| UF5401G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5401G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5401G           | DO-201AD     | 500 Units/Box     |
| UF5402G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5402G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5402G           | DO-201AD     | 500 Units/Box     |
| UF5403G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5403G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5403G           | DO-201AD     | 500 Units/Box     |
| UF5404G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5404G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5404G           | DO-201AD     | 500 Units/Box     |
| UF5406G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5406G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5406G           | DO-201AD     | 500 Units/Box     |
| UF5407G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5407G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5407G           | DO-201AD     | 500 Units/Box     |
| UF5408G-T3        | DO-201AD     | 1200/Tape & Reel  |
| <b>UF5408G-TB</b> | DO-201AD     | 1200/Tape & Box   |
| UF5408G           | DO-201AD     | 500 Units/Box     |

1. Products listed in **bold** are WTE **Preferred** devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, UF5400G-TB-LF.**

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**WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT.** WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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