

UG4A THRU UG4D

ULTRAFAST EFFICIENT PLASTIC RECTIFIER

Reverse Voltage – 50 to 200 V

Forward Current – 4 A

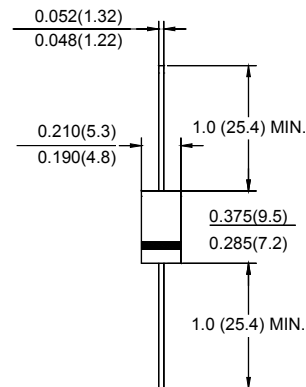
Features

- Ultrafast recovery time for high efficiency
- Soft recovery characteristics
- Excellent high temperature switching
- Glass passivated junction

Mechanical Data

- Case: Molded plastic, DO-201AD
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

DO-201AD



Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

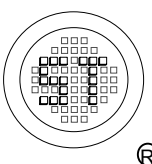
| Parameter | Symbols | UG4A | UG4B | UG4C | UG4D | Units |
|---|-----------------|---|------|------|------|--------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 105 | 140 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current 0.375"(9.5 mm) Lead Length at $T_L = 75\text{ }^\circ\text{C}$ | $I_{(AV)}$ | 4 | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half-sine-wave Superimposed on rated load (JEDEC method) at $T_L = 75\text{ }^\circ\text{C}$ | I_{FSM} | 150 | | | | A |
| Maximum Forward Voltage at 4 A | V_F | 0.95 | | | | V |
| Maximum Reverse Current $T_A = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 100\text{ }^\circ\text{C}$ | I_R | 5 300 | | | | μA |
| Maximum Reverse Recovery Time ¹⁾ | t_{rr} | 20 | | | | ns |
| Maximum Reverse Recovery Time ²⁾ | t_{rr} | $T_J = 25\text{ }^\circ\text{C}$ 30 $T_J = 100\text{ }^\circ\text{C}$ 50 | | | | ns |
| Maximum Recovered stored charge Time ²⁾ | Q_{rr} | $T_J = 25\text{ }^\circ\text{C}$ 15 $T_J = 100\text{ }^\circ\text{C}$ 30 | | | | nC |
| Typical Junction Capacitance ³⁾ | C_J | 20 | | | | pF |
| Typical Thermal Resistance ⁴⁾ | $R_{\theta JA}$ | 25 | | | | $^\circ\text{C/W}$ |
| Operating Junction and Storage Temperature Range | T_J, T_{stg} | -55 to +150 | | | | $^\circ\text{C}$ |

¹⁾ Reverse recovery test conditions: $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

²⁾ t_{rr} and Q_{rr} measured at tester: $I_F = 4\text{ A}$, $V_R = 30\text{ V}$, $di/dt = 50\text{ A}/\mu\text{s}$, $I_{rr} = 10\% I_{RM}$ for measurement of t_{rr} .

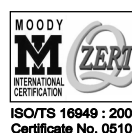
³⁾ Measured at 1 MHz and applied reverse voltage of 4 V.

⁴⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length.



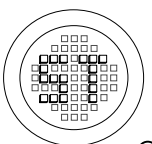
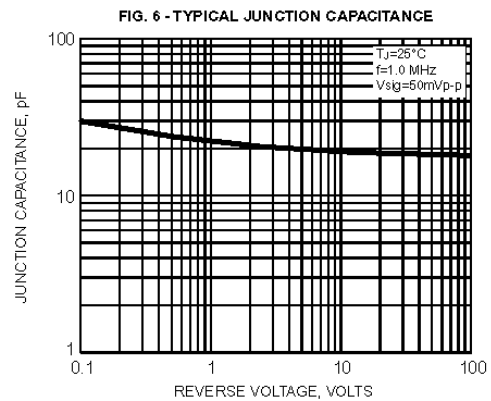
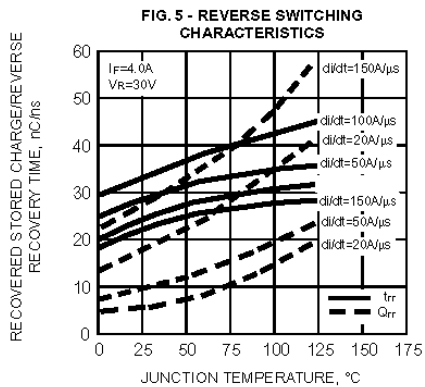
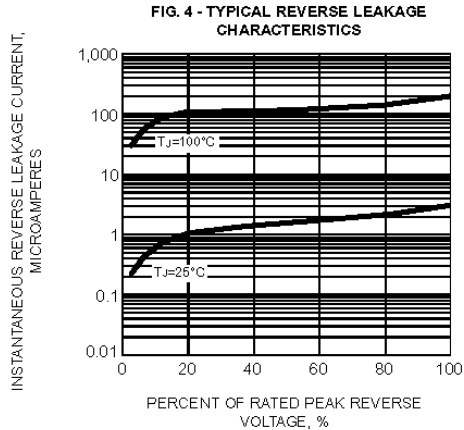
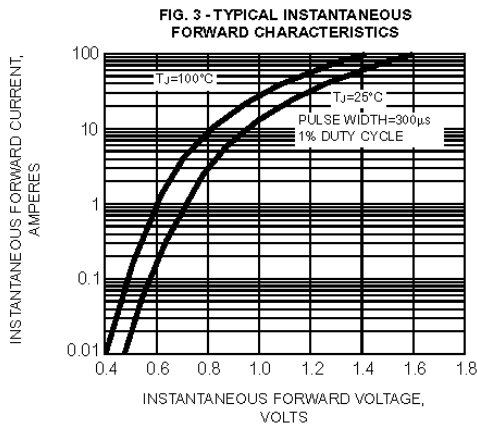
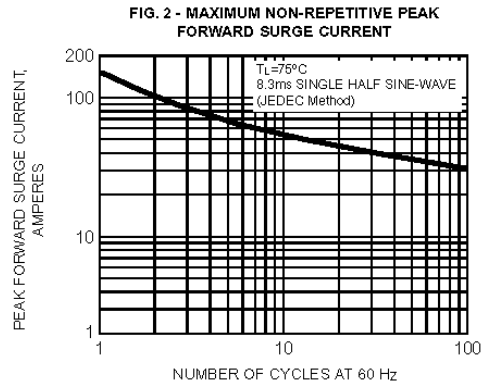
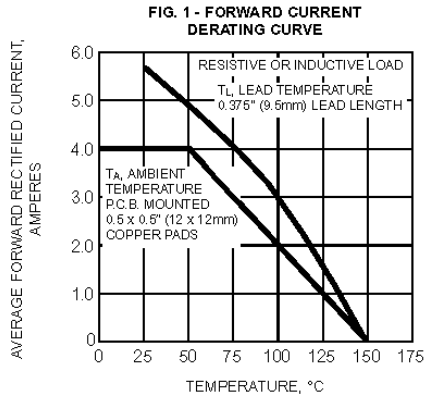
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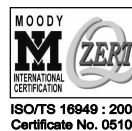


Dated : 26/04/2006 C

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ISO/TS 16949 : 2002
 Certificate No. 05103

ISO 14001:2004
 Certificate No. 7116

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