

Fast Recovery Rectifiers
Reverse Voltage - 50 to 1000 V
Forward Current - 3 A

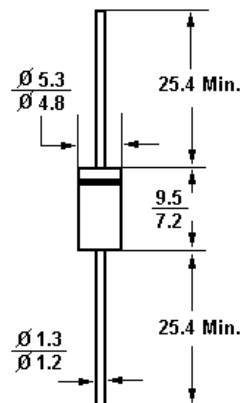
DO-201AD

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- Fast switching for high efficiency.
- Construction utilizes void-free molded plastic technique.
- 3.0 ampere operation at $T_a=75^{\circ}\text{C}$ with no thermal runaway.
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs (2.3kg) tension.

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.



Dimensions in mm

Absolute Maximum Ratings and Characteristics @ $T_a=25^{\circ}\text{C}$ unless otherwise specified.

Symbols		FR301	FR302	FR303	FR304	FR305	FR306	FR307	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Average Forward Rectified Current at T _a = 75 °C	I _{F(AV)}	3							A
Peak Forward Surge Current 8.3mS single half sine-wave (MIL-STD-750D 4066 method)	I _{FSM}	150							A
Maximum Instantaneous Forward Voltage ³⁾ at I _{FM} = 3 A	V _F	1.3							V
Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a = 55 °C	I _R	10 150							μA
Maximum Reverse Recovery Time ¹⁾	T _{rr}	150				250	500		nS
Typical Junction Capacitance ²⁾	C _J	65							pF
Operating and Storage Temperature Range	T _J , T _{Stg}	-55 to +150							°C

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

²⁾ Measured at 1MHz and applied reverse voltage of 4V.

³⁾ Pulse test: pulse width 300 μs , Duty cycle 1%.

