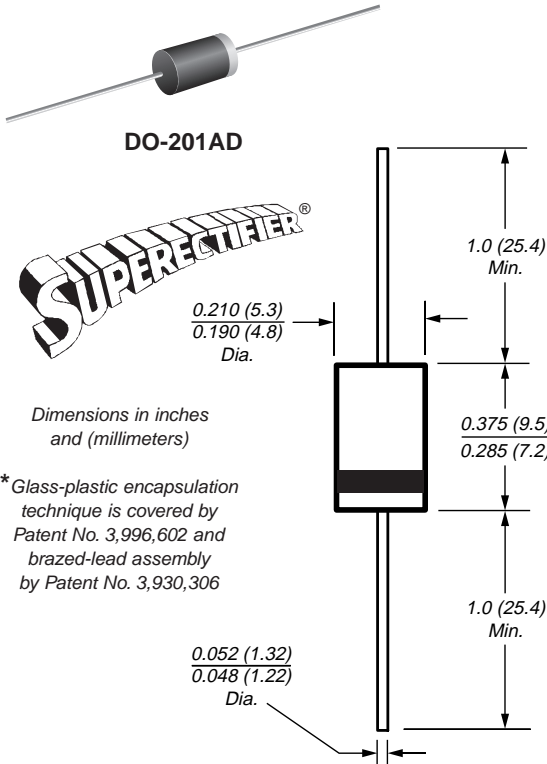




Glass Passivated Junction Rectifiers

Rev. Voltage 200 to 800V
Forward Current 3.0A



Patented*

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- Capable of meeting environmental standards of MIL-S-19500
- 3.0 Ampere operation at $T_A=70^\circ\text{C}$ with no thermal runaway
- Typical I_R less than $0.1\mu\text{A}$
- High temperature soldering guaranteed: $350^\circ\text{C}/10$ seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

Case: JEDEC DO-201AD, molded plastic over glass body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.04 oz., 1.12 g

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	1N5624	1N5625	1N5626	1N5627	Unit
*Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	V
*Maximum DC blocking voltage	V_{DC}	200	400	600	800	V
*Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 70^\circ\text{C}$	$I_{F(AV)}$	3.0				A
*Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125				A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead length at $T_A = 70^\circ\text{C}$	$I_{R(AV)}$	200				μA
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	20				$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175				$^\circ\text{C}$

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

*Maximum instantaneous forward voltage at 3.0A	$T_A = 25^\circ\text{C}$ $T_A = 70^\circ\text{C}$	V_F	1.0 0.95		V
Maximum reverse current at rated DC blocking voltage	$T_A = 25^\circ\text{C}$ $T_A = 150^\circ\text{C}$	I_R	300	200	μA
Typical reverse recovery time at $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$		t_{rr}	3.0		μs
Typical junction capacitance at 4.0V, 1MHz		C_J	40		pF

Note: (1) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted
 *JEDEC registered values

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

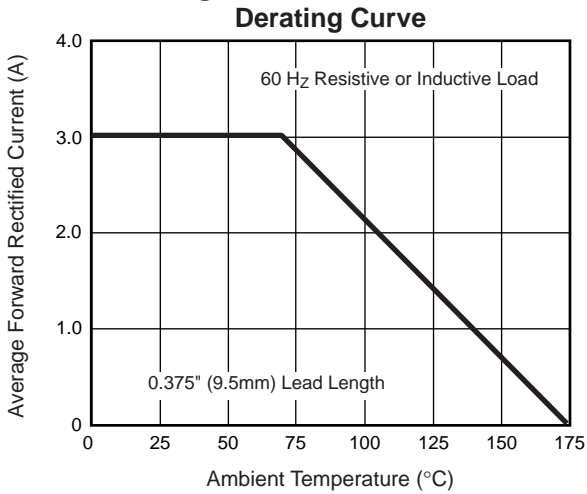


Fig. 3 – Typical Instantaneous Forward Characteristics

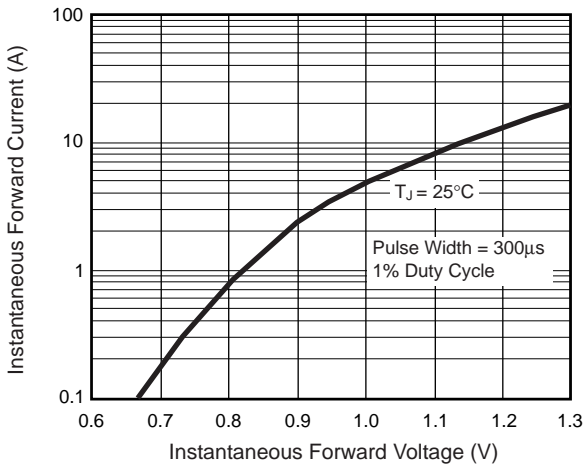


Fig. 5 – Typical Junction Capacitance

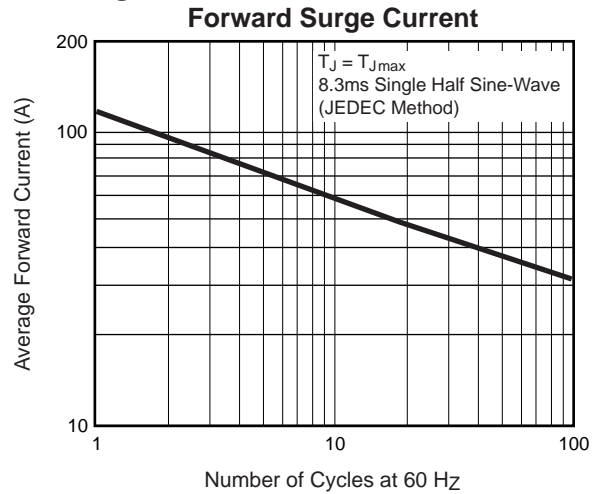
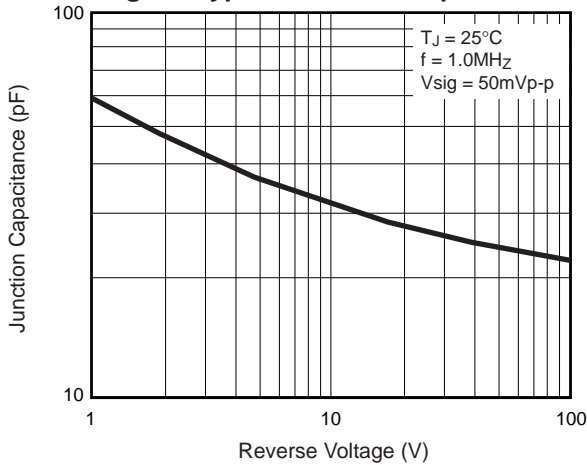


Fig. 4 – Typical Reverse Characteristics

