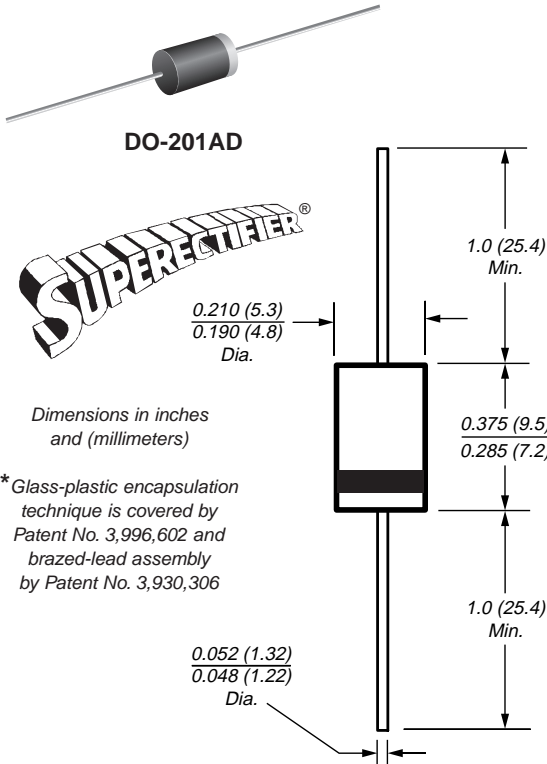




## Glass Passivated Junction Rectifiers

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  $25^\circ\text{C}$  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				$\mu\text{A}$
Typical thermal resistance <sup>(1)</sup>	$R_{\theta JA}$	20				$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +175				$^\circ\text{C}$

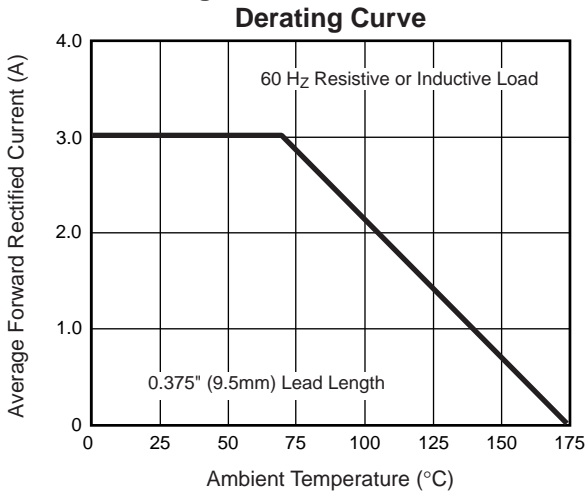
### Electrical Characteristics

Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified.

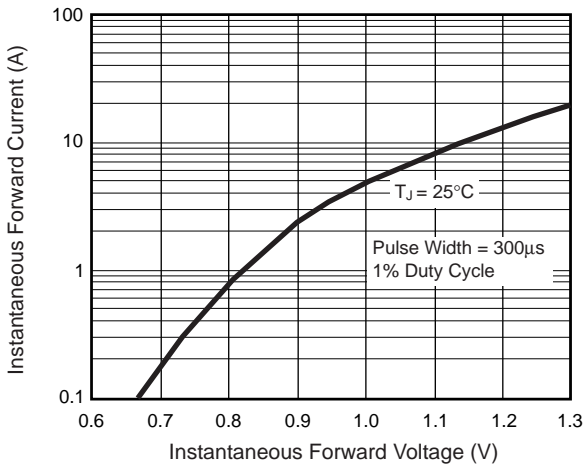
*Maximum instantaneous forward voltage at 3.0A	$T_A = 25^\circ\text{C}$ $T_A = 70^\circ\text{C}$	$V_F$	1.0 0.95		V
Maximum reverse current at rated DC blocking voltage	$T_A = 25^\circ\text{C}$ $T_A = 150^\circ\text{C}$	$I_R$	300	200	$\mu\text{A}$
Typical reverse recovery time at $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$		$t_{rr}$	3.0		$\mu\text{s}$
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

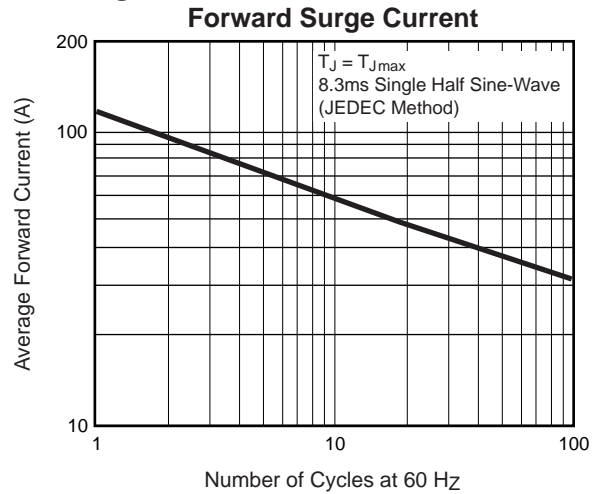
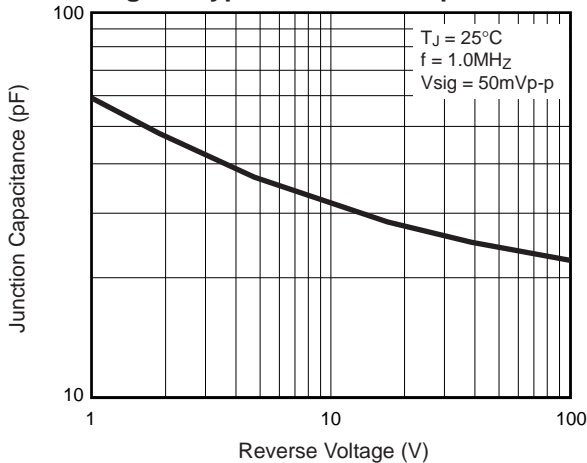
## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)



**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 5 – Typical Junction Capacitance**



**Fig. 4 – Typical Reverse Characteristics**

