

# 1N5624 - 1N5627

**PRV : 200 - 800 Volts**  
**Io : 3.0 Amperes**

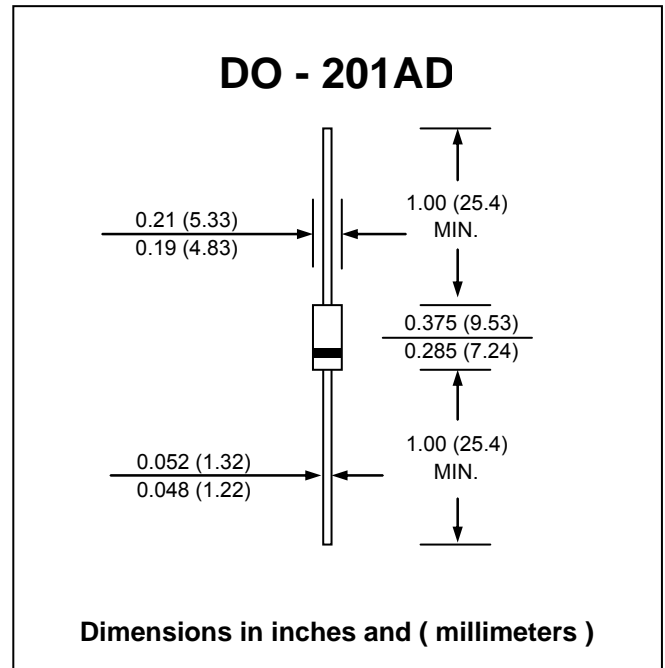
## FEATURES :

- \* Glass passivated cavity-free junction
- \* Low forward voltage drop
- \* High reliability
- \* Low reverse current
- \* High forward surge capability
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : DO-201AD Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 1.16 grams

## GLASS PASSIVATED JUNCTION SILICON RECTIFIERS



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

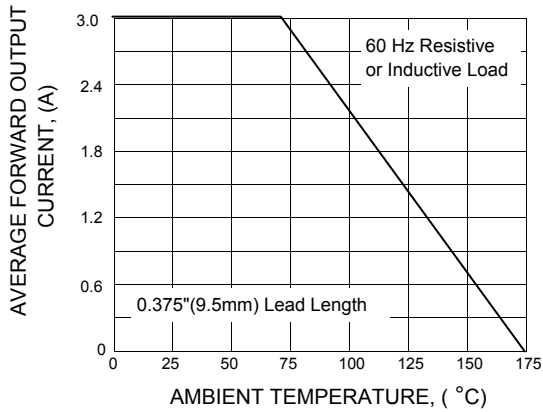
RATING	SYMBOL	1N5624	1N5625	1N5626	1N5627	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	V
Maximum RMS Voltage	$V_{RMS}$	140	280	420	560	V
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	800	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 70\text{ }^\circ\text{C}$	$I_{F(AV)}$	3.0				A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	125				A
Maximum Forward Voltage at $I_F = 3.0\text{ A}$ , $T_a = 25\text{ }^\circ\text{C}$ at $I_F = 3.0\text{ A}$ , $T_a = 175\text{ }^\circ\text{C}$	$V_F$	1.00 0.95				V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at rated DC Blocking Voltage $T_a = 175\text{ }^\circ\text{C}$	$I_R$	5.0				$\mu\text{A}$
	$I_{R(H)}$	300		200		$\mu\text{A}$
Maximum Full Load Reverse Current, Full Cycle Average 0.375"(9.5mm) Lead Length at $T_a = 70\text{ }^\circ\text{C}$	$I_{R(AV)}$	150		100		$\mu\text{A}$
Typical Junction Capacitance (Note1)	$C_J$	40				pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	20				$^\circ\text{C/W}$
	$R_{\theta JL}$	10				$^\circ\text{C/W}$
Junction Temperature Range	$T_J$	- 65 to + 175				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 175				$^\circ\text{C}$

### Notes :

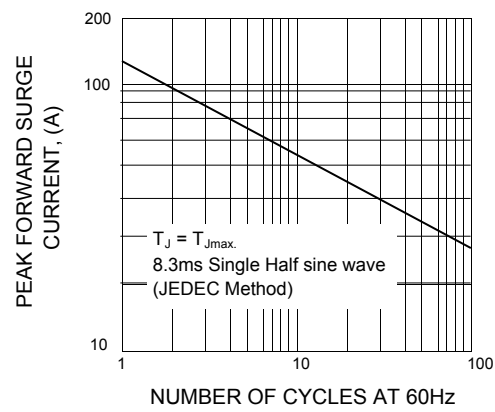
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (2) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, with both leads attached between heat sinks

## RATING AND CHARACTERISTIC CURVES ( 1N5624 ~ 1N5627 )

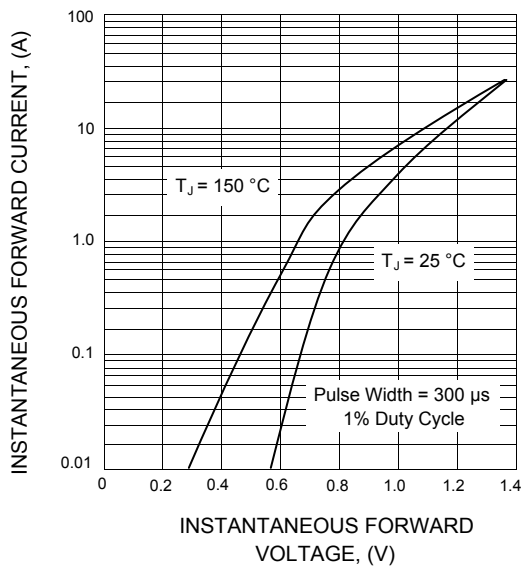
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



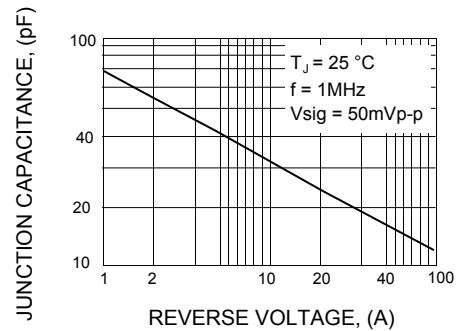
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL JUNCTION CAPACITANCE**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

