

# LN3N-LR

**PRV : 1200 Volts**  
**Io : 3.0 Amperes**

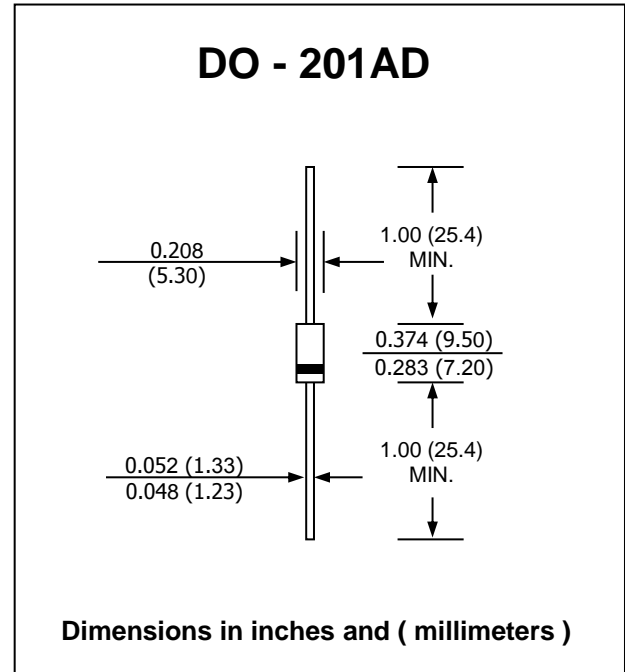
**FEATURES :**

- \* High current capability
- \* Glass Passivated Junction
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* 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 : 0.0012 grams

## GLASS PASSIVATED JUNCTION SILICON RECTIFIER DIODES



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

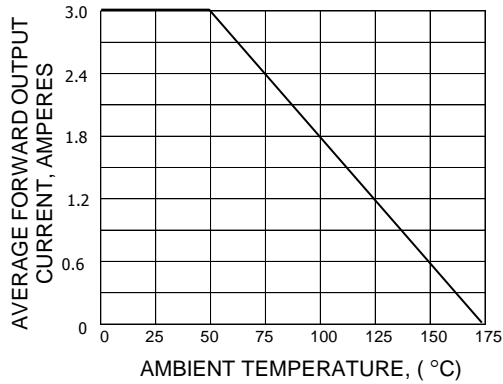
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1200	V
Maximum RMS Voltage	V <sub>RMS</sub>	840	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	1200	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 50 °C	I <sub>F</sub>	3.0	A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150	A
Maximum Forward Voltage at I <sub>F</sub> = 3.0 Amps.	V <sub>F</sub>	1.0	V
Maximum DC Reverse Current Ta = 25 °C at rated DC Blocking Voltage Ta = 100 °C	I <sub>R</sub>	0.5	μA
	I <sub>R(H)</sub>	50	μA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	50	pF
Typical Thermal Resistance (Note2)	RθJA	18	°C/W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175	°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175	°C

**Notes :**

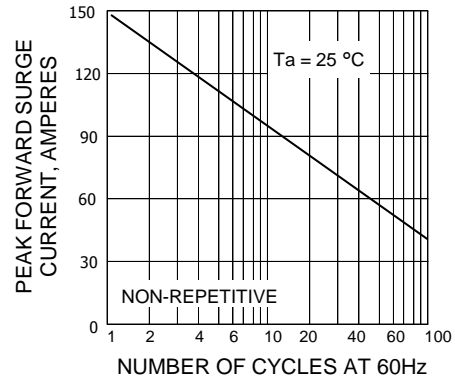
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC
- (2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

### RATING AND CHARACTERISTIC CURVES ( LN3N-LR )

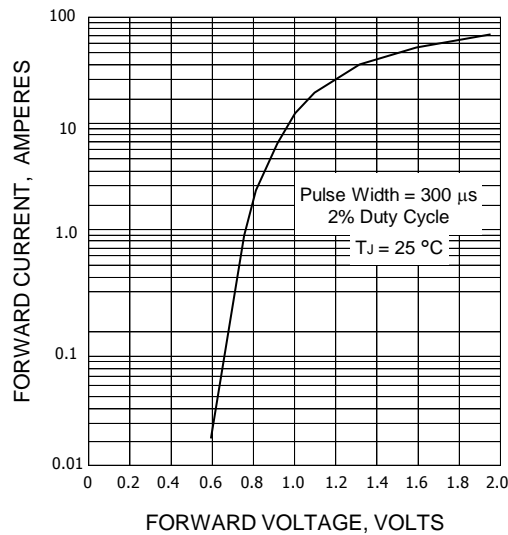
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



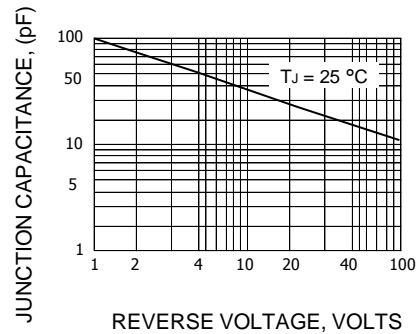
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL JUNCTION CAPACITANCE**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

