

# RL4A

# ULTRA FAST RECOVERY RECTIFIER DIODE

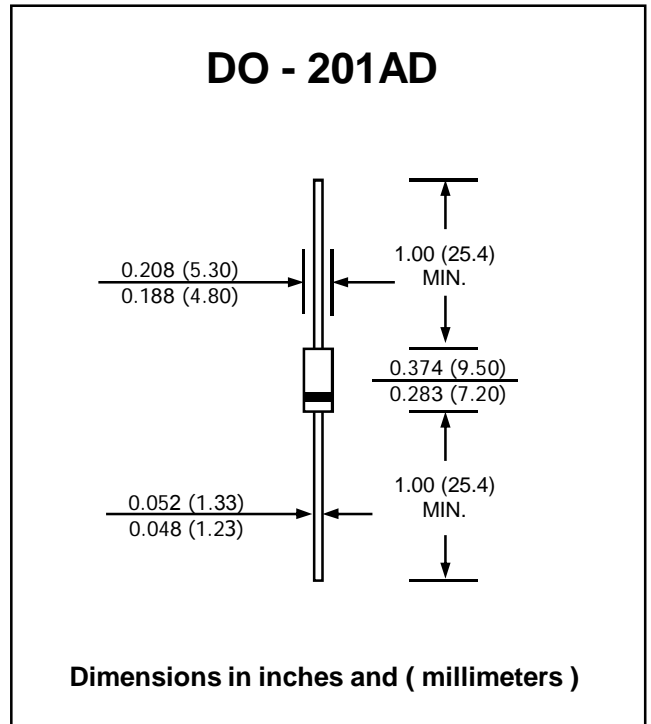
**PRV : 600 Volts**  
**Io : 3.0 Ampere**

**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* 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 : 1.21 grams



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25 °C ambient temperature unless otherwise specified.  
 For capacitive load, derate current by 20%.

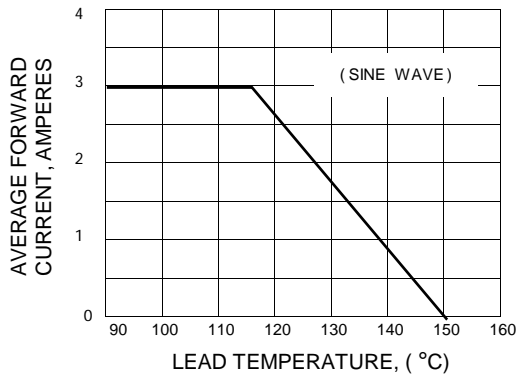
RATING	SYMBOL	VALUE	UNIT
Maximum Peak Reverse Voltage	$V_{RM}$	600	V
Maximum Average Rectified Forward Current , $T_L = 115\text{ }^\circ\text{C}$	$I_{F(AV)}$	3.0	A
Maximum Peak Forward Surge Current ( 50 Hz, Half-cycle, Sine wave, Single Shot )	$I_{FSM}$	80	A
Maximum Forward Voltage at $I_F = 3.0\text{ A}$	$V_F$	1.5	V
Maximum Reverse Current at $V_R = V_{RM}$	$I_R$	50	$\mu\text{A}$
Maximum Reverse Current at $V_R = V_{RM}$ $T_J = 150\text{ }^\circ\text{C}$	$I_{R(H)}$	100	$\mu\text{A}$
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	50	ns
Maximum Thermal Resistance , Junction to Case	$R_{th(j-c)}$	8.0	$^\circ\text{C/W}$
Junction Temperature Range	$T_J$	- 40 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 40 to + 150	$^\circ\text{C}$

**Note:**

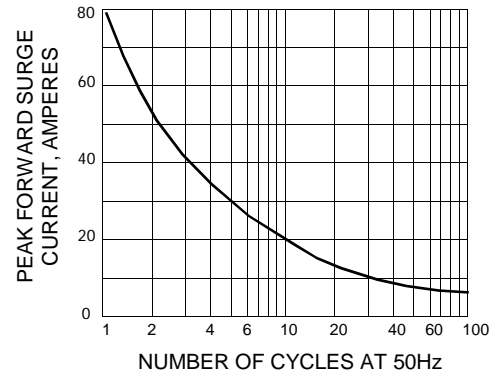
(1) Reverse Recovery Test Conditions :  $I_F = 500\text{ mA}$ ,  $I_{RP} = 500\text{ mA}$ .

**RATING AND CHARACTERISTIC CURVES ( RL4A )**

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



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**

