

RL4Z

ULTRA FAST RECOVERY RECTIFIER DIODE

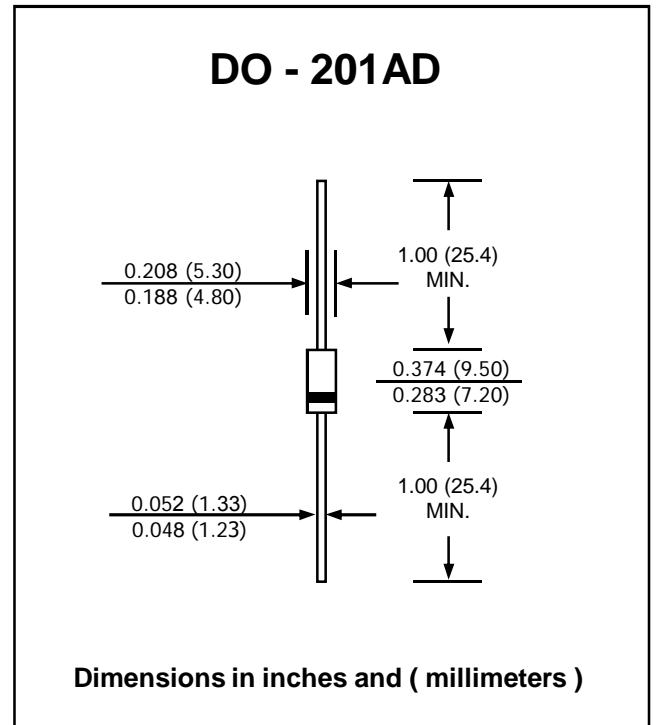
PRV : 200 Volts
Io : 3.5 Ampere

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.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Peak Reverse Voltage	V _{RM}	200	V
Maximum Peak Reverse Surge Voltage	V _{RSM}	200	V
Maximum Average Rectified Forward Current , Ta = 60 °C	I _{F(AV)}	3.5 (With Heatsink)	A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sine wave, Single Shot)	I _{FSM}	80	A
Maximum Forward Voltage at I _F = 3.5 A	V _F	0.95	V
Maximum Reverse Current at V _R = V _{RM}	I _R	150	μA
Maximum Reverse Current at V _R = V _{RM} Ta = 100 °C	I _{R(H)}	500	μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50	ns
Maximum Thermal Resistance , Junction to Case	R _{th(j-c)}	8	°C/W
Junction Temperature Range	T _J	- 40 to + 150	°C
Storage Temperature Range	T _{STG}	- 40 to + 150	°C

Note:

(1) Reverse Recovery Test Conditions : I_F = 100 mA, I_{RP} = 100 mA.

RATING AND CHARACTERISTIC CURVES (RL4Z)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

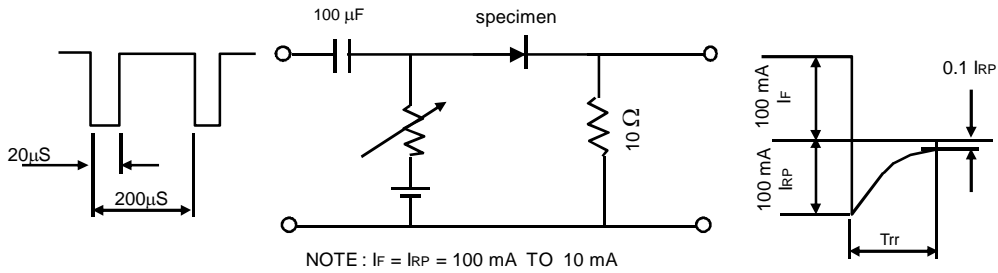


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

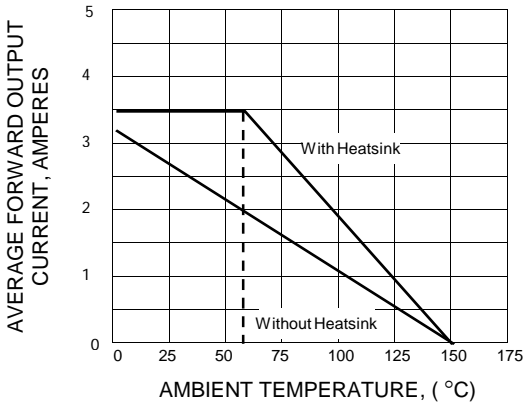


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

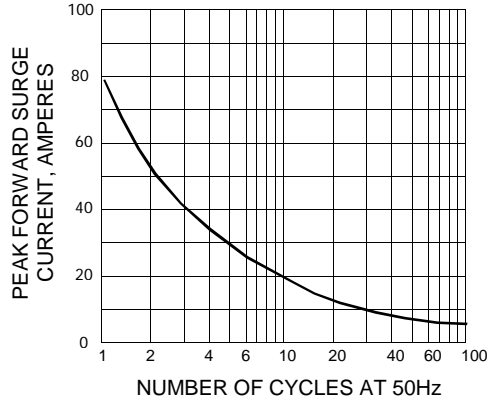


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

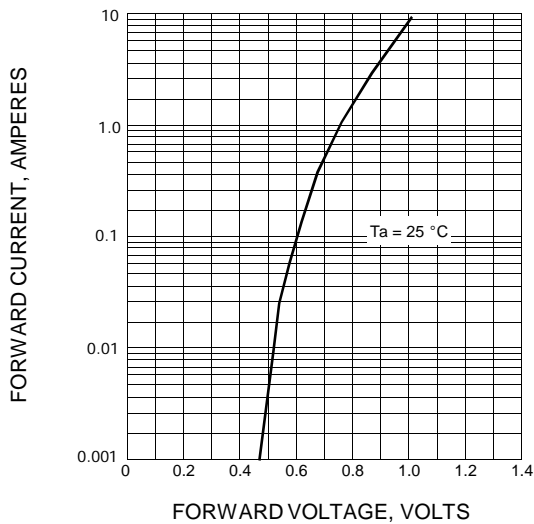


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

