

# ERD07-13 ~ ERD07-15

## SILICON RECTIFIER DIODES / DAMPER

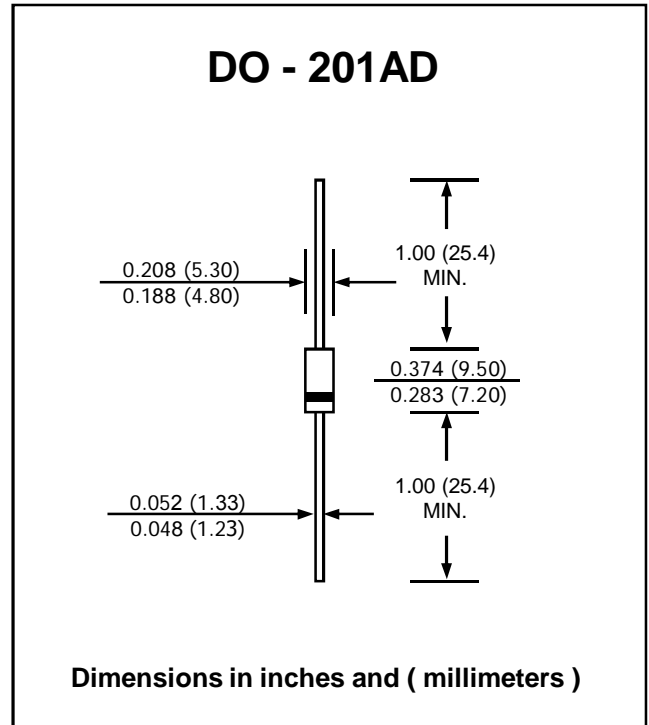
**PRV : 1300 - 1500 Volts**  
**Io : 1.5 Ampere**

### 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	ERD07-13	ERD07-15	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1300	1500	V
Maximum Average Forward Current , T <sub>L</sub> = 125 °C	I <sub>F(AV)</sub>	1.5		A
Maximum Peak Forward Surge Current ( Sine wave, 10 ms )	I <sub>FSM</sub>	50		A
Maximum Forward Voltage at I <sub>F</sub> = 4 A	V <sub>F</sub>	1.2		V
Maximum Reverse Current at V <sub>RRM</sub>	I <sub>R</sub>	10		μA
Maximum Reverse Recovery Time ( Note 1 )	T <sub>rr</sub>	1.5		μs
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150		°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150		°C

**Note :**

( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 100 mA, I<sub>R</sub> = 100 mA.

## RATING AND CHARACTERISTIC CURVES ( ERD07-13 ~ ERD07-15 )

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

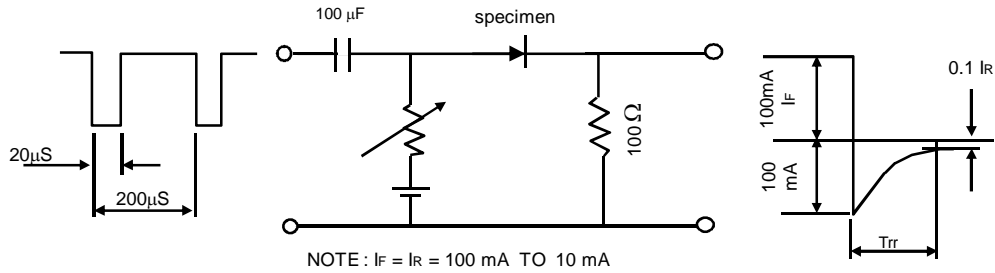


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

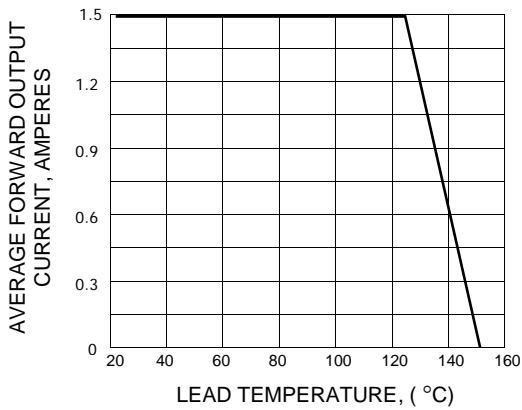


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

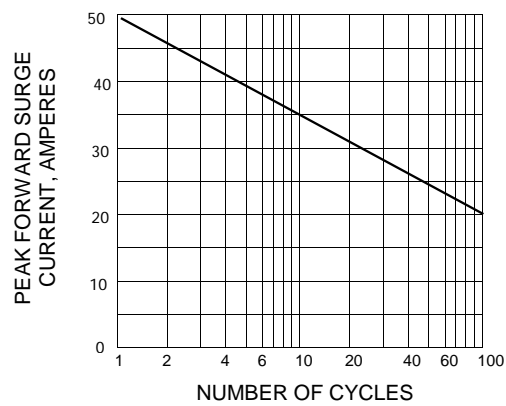


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

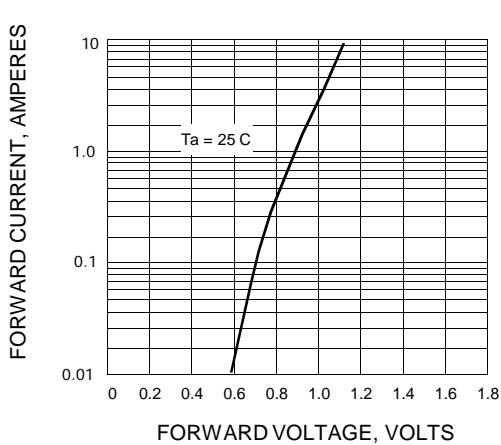


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

