

# MUR460-E

## GLASS PASSIVATED JUNCTION Ultra fast Plastic Rectifiers

VOLTAGE: 600V

CURRENT: 4.0A

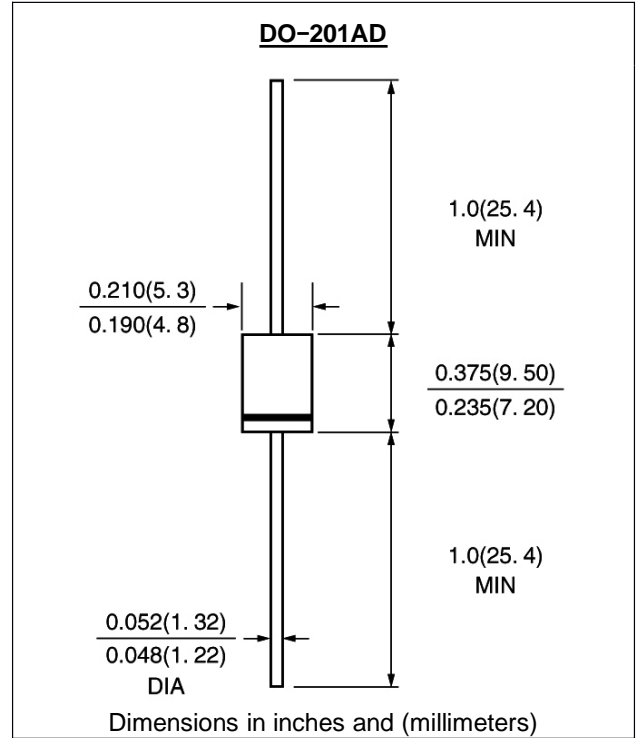


### FEATURE

Plastic package has Underwriters Laboratories Flammability Classification 94V-0  
 Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes  
 Ultra fast recovery time for high efficiency  
 Excellent high temperature switching  
 Glass passivated junction  
 High temperature soldering guaranteed:  
 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension  
 Halogen Free

### MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body over passivated chip  
 Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026  
 Polarity: Color band denotes cathode end  
 Mounting Position: Any  
 Weight: 0.045 oz., 1.2 g



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

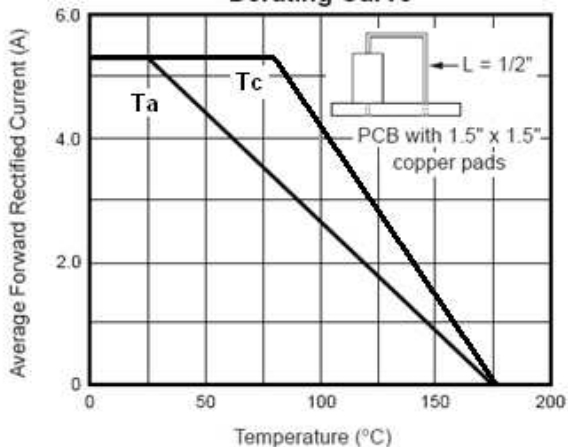
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

|   | SYMBOL               | MUR460-E    | units |
|---|----------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>rrm</sub>     | 600         | V     |
| Maximum RMS Voltage   | V <sub>rms</sub>     | 420         | V     |
| Maximum DC blocking Voltage   | V <sub>dc</sub>      | 600         | V     |
| Maximum Average Forward Rectified   | I <sub>f(av)</sub>   | 4.0         | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I <sub>fsm</sub>     | 150         | A     |
| Maximum Forward Voltage at rated Forward Current and 25°C                         | V <sub>f</sub>       | 1.28        | V     |
| Maximum Reverse Recovery Time (Note 1)  | T <sub>rr</sub>      | 45          | nS    |
| Typical thermal resistance junction to ambient (Note 2)                           | R <sub>th(ja)</sub>  | 28          | °C/W  |
| Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C        | I <sub>r</sub>       | 10<br>100   | μA    |
| Storage and Operating Temperature Range   | T <sub>stg, Tj</sub> | -55 to +150 | °C    |

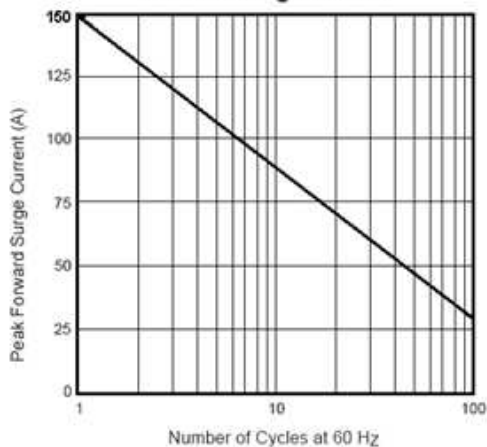
Note:

- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
- Lead length = 1/2" on P.C. board with 1.5" x1.5" copper surface

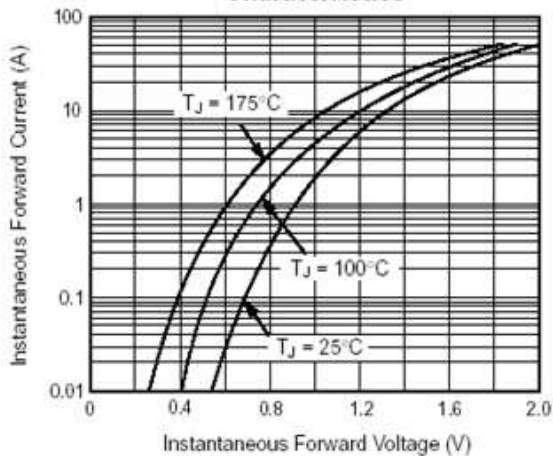
**Fig. 1 – Forward Current Derating Curve**



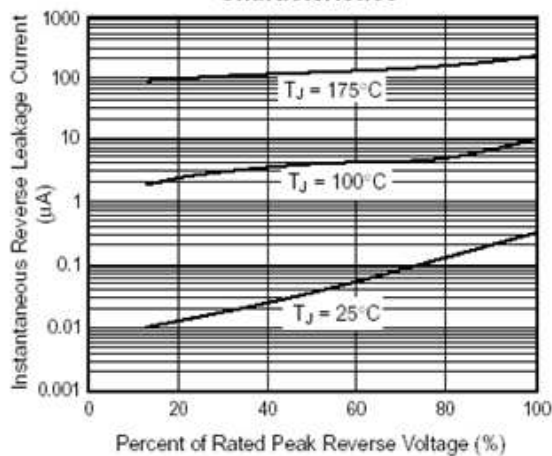
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Characteristics**



**Fig. 5 – Typical Junction Capacitance per Leg**

