

# MUR4100

## GLASS PASSIVATED JUNCTION Ultra fast Plastic Rectifiers

VOLTAGE: 1000V

CURRENT:4.0A

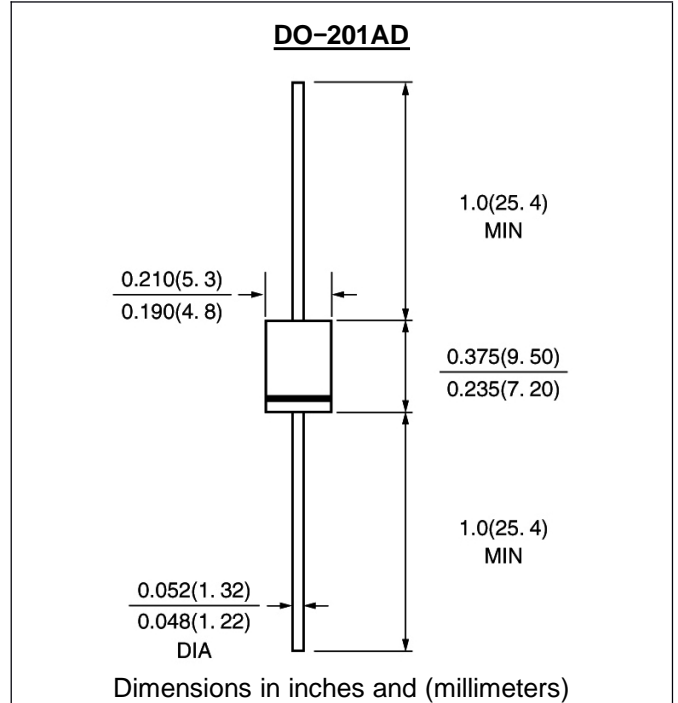


### FEATURE

- 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

### 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

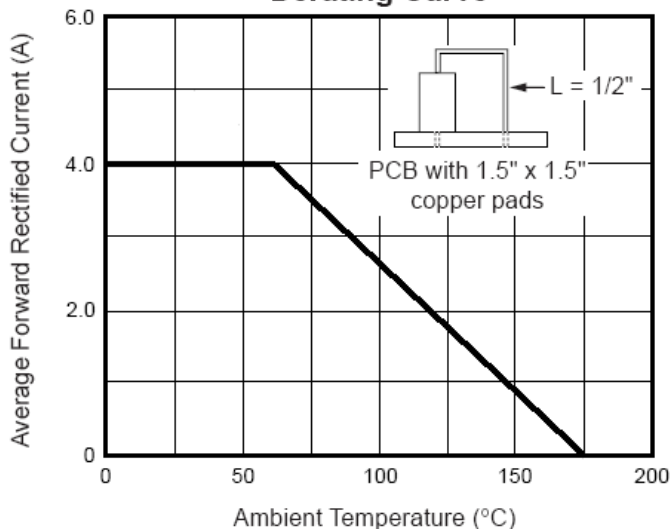
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	MUR4100	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	700	
Maximum DC blocking Voltage	V <sub>dc</sub>	1000	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>	80	A
Maximum Forward Voltage at rated Forward Current and 25°C	V <sub>f</sub>	1.85	V
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	75	nS
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	10 100	μA
Typical thermal resistance junction to ambient (Note 2)	R <sub>th(ja)</sub>	28	°C/W
Storage and Operating Temperature Range	T <sub>stg</sub> , T <sub>j</sub>	-65 to +175	°C

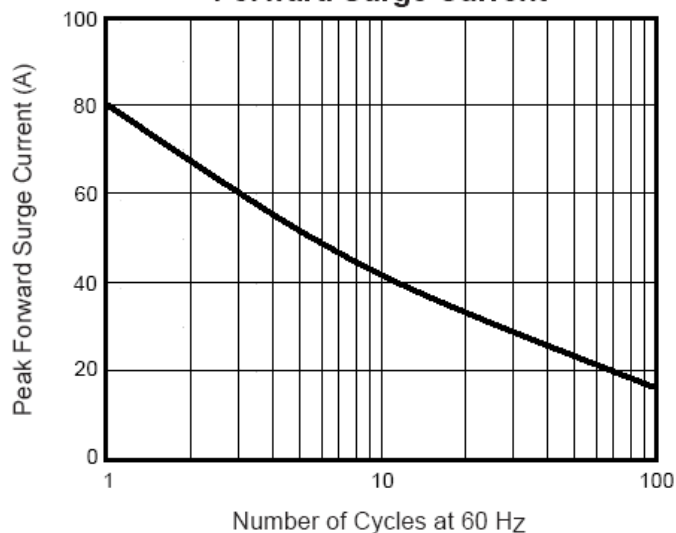
Note:

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

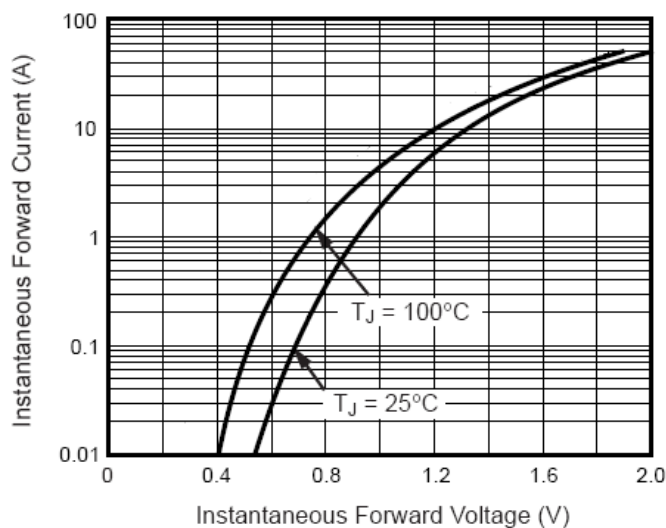
**Fig. 1 – Forward Current Derating Curve**



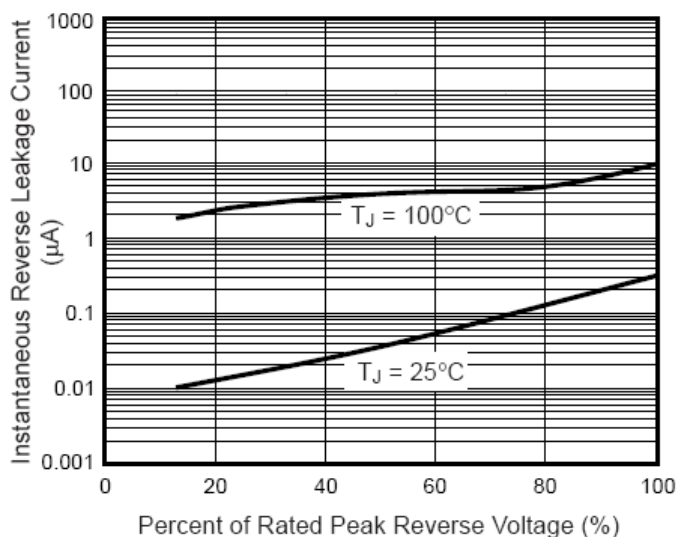
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



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



**Fig. 4 – Typical Reverse Characteristics**



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

