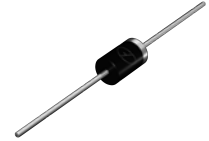


## Features

- Ideally suited for use in very high frequency switching power supplies, inverters and as a free wheeling diode
- Ultrafast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction



Package: DO-201AD

## 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 ounce, 1.2 grams

## Maximum Ratings and Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

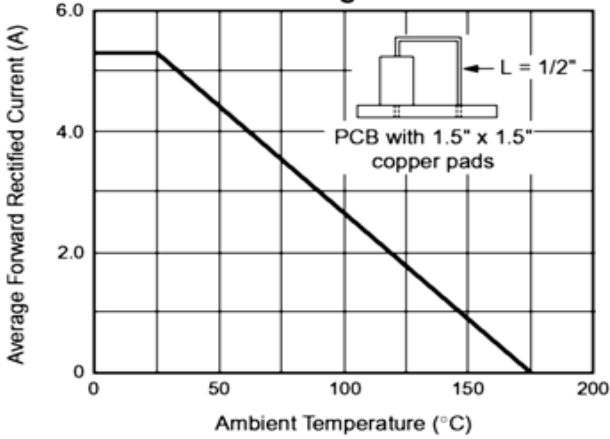
Parameter	Symbol	MUR440	MUR460	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	600	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	400	600	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	V
Maximum Average Forward Rectified Current (See Figure 1)	I <sub>F(AV)</sub>	4.0		A
Peak Forward Surge Current 8.3 mS Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	125.0		A
Maximum Instantaneous Forward Voltage <sup>1</sup>	at 3.0A, T <sub>J</sub> =150°C	1.05		V
	at 3.0A, T <sub>J</sub> =25°C	1.25		
	at 4.0A, T <sub>J</sub> =25°C	1.28		
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage <sup>1</sup>	T <sub>J</sub> =25°C	10.0		μA
	T <sub>J</sub> =150°C	250		
Maximum Reverse Recovery Time at I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A	t <sub>rr</sub>	50		nS
Maximum Reverse Recovery Time at I <sub>F</sub> =1.0A, di/dt=50A/μS, V <sub>R</sub> =30V, I <sub>rr</sub> =10% I <sub>RM</sub>	t <sub>rr</sub>	75		nS
Maximum Forward Recovery Time at I <sub>F</sub> =1.0A, di/dt=100A/μS, recovery to 1.0V	t <sub>rr</sub>	50		nS
Typical Thermal Resistance Junction to Ambient <sup>2</sup>	R <sub>θJA</sub>	28		°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150		°C

- Notes:**
1. Pulse test: t<sub>p</sub>=300μS, duty cycle < 2%
  2. Lead length = 1/2" on P.C. Board with 1.5" x 1.5" copper surface

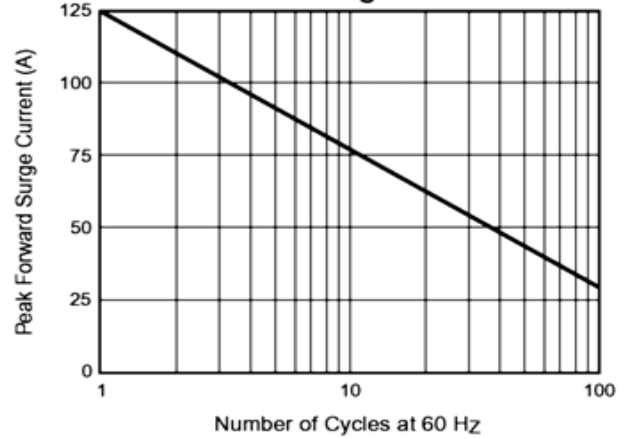
## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

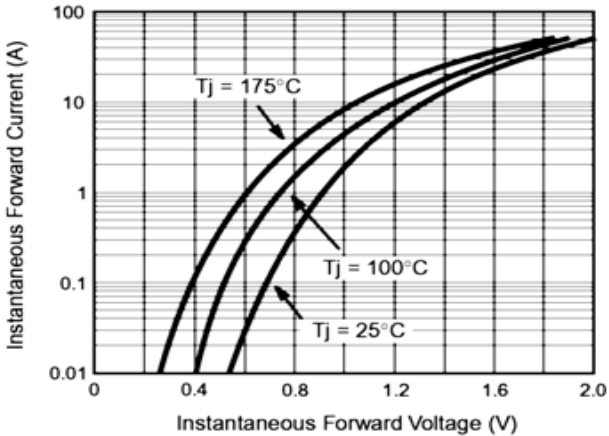
**Fig. 1 – Forward Current Derating Curve**



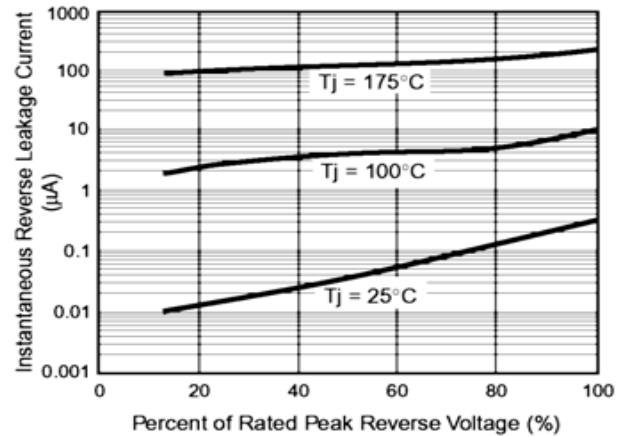
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



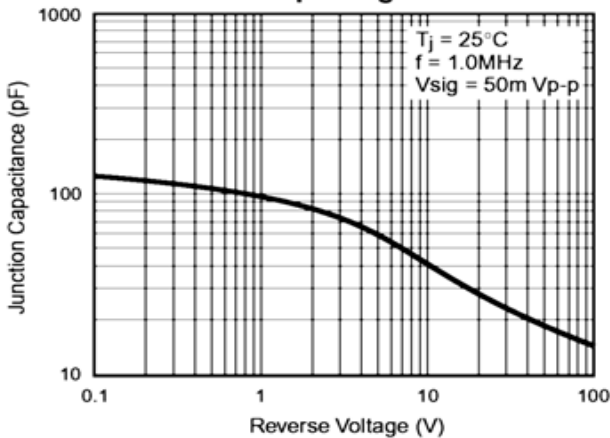
**Fig. 3 – MUR460 Typical Instantaneous Forward Characteristics**



**Fig. 4 – MUR460 Typical Reverse Characteristics**



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

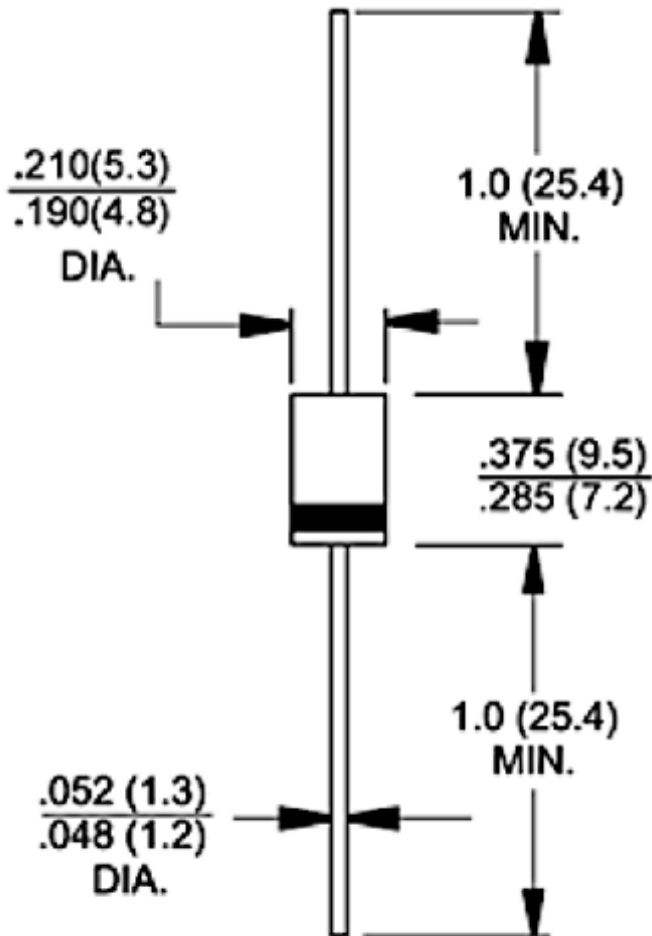


# MUR440 and MUR460

Ultrafast Recovery Rectifiers  
Reverse Voltage 400V to 600V Forward Current 4.0A

## Package Outline Dimensions

DO-201AD



**Dimensions in inches and (millimeters)**