

# MUR440 - MUR460

**PRV : 400 - 600 Volts**  
**Io : 4.0 Amperes**

## FEATURES :

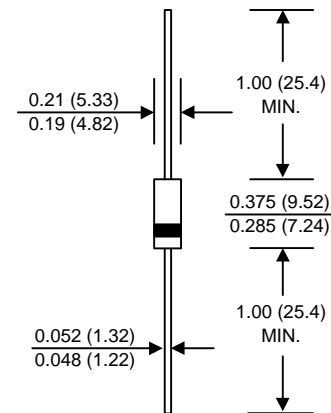
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

## 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 : 1.16 grams

# ULTRAFAST RECTIFIERS

## DO-201AD



Dimensions in inches and ( millimeters )

## 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	MUR440	MUR460	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	600	V
Maximum Working Reverse Voltage	V <sub>RWM</sub>	400	600	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	V
Maximum Average Forward Current , Ta = 40 °C	I <sub>F(AV)</sub>	4.0		A
Maximum Non-repetitive Peak Forward Surge Current	I <sub>FSM</sub>	70		A
Maximum Forward Voltage at I <sub>F</sub> = 4 A. (Note 1)	V <sub>F</sub>	1.28		V
Maximum Reverse Current at T <sub>J</sub> = 25 °C	I <sub>R</sub>	10		μA
Rated DC Blocking Voltage T <sub>J</sub> = 125 °C	I <sub>R(H)</sub>	250		μA
Maximum Reverse Recovery Time ( Note 2 )	T <sub>rr</sub>	50		ns
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175		°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175		°C

### Notes :

- (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle ≤ 2.0%
- (2) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A ; I<sub>rr</sub> = 0.25 A

## RATING AND CHARACTERISTIC CURVES ( MUR440 - MUR460 )

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

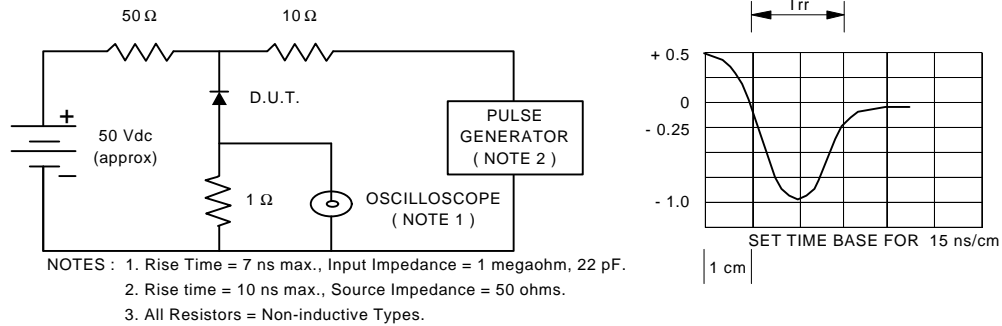


FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

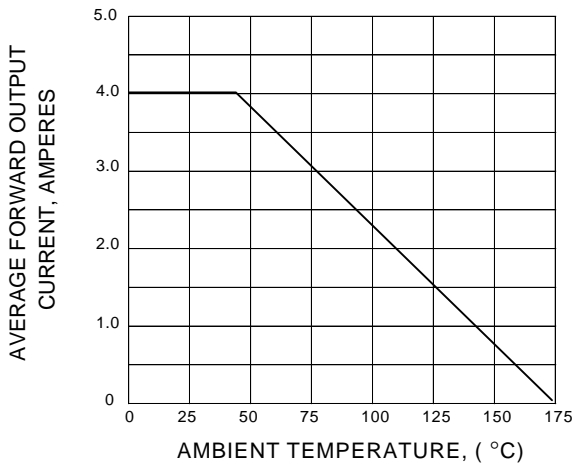


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

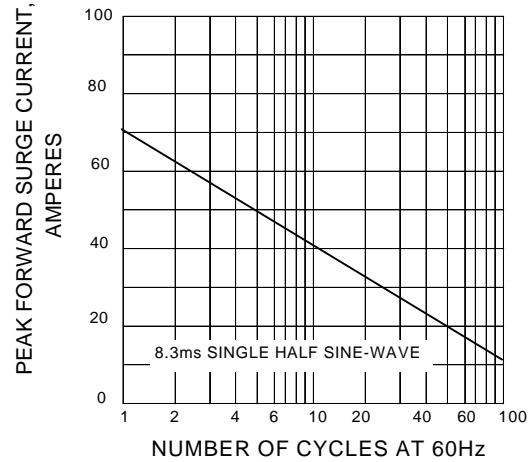


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

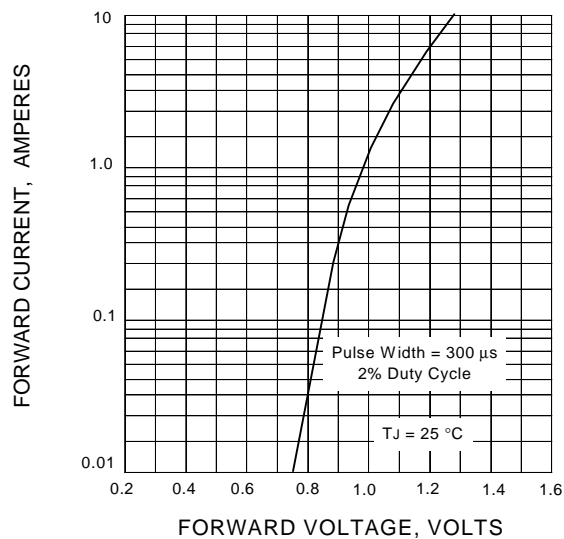


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

