

MUR440 - MUR460

PRV : 400 - 600 Volts
Io : 4.0 Amperes

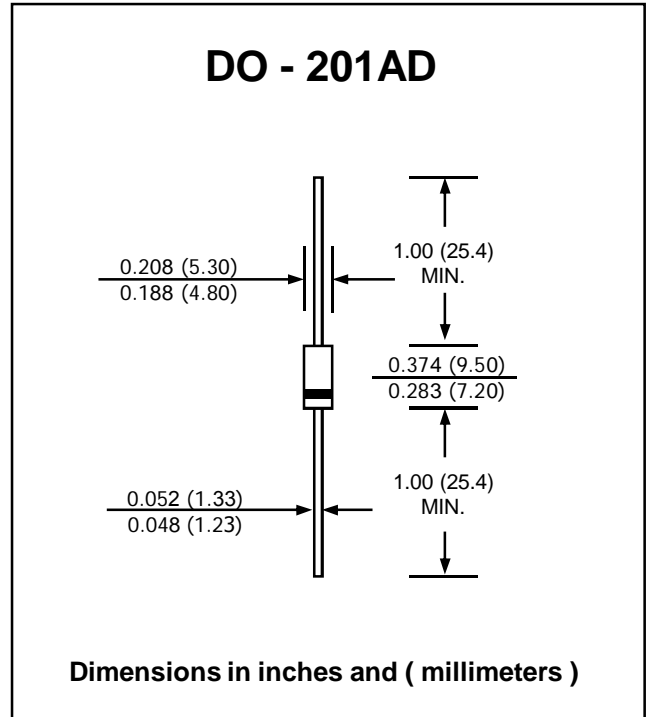
FEATURES :

- * 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



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%.

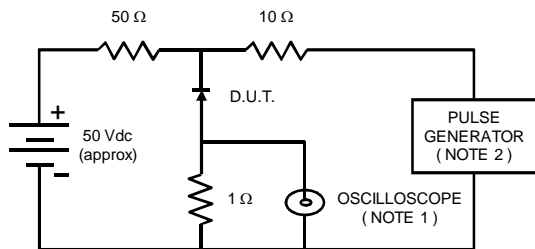
RATING	SYMBOL	MUR440	MUR460	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	400	600	V
Maximum Working Reverse Voltage	V _{RWM}	400	600	V
Maximum DC Blocking Voltage	V _{DC}	400	600	V
Maximum Average Forward Current , Ta = 40 °C	I _{F(AV)}	4.0		A
Maximum Non-repetitive Peak Forward Surge Current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

Notes :

- (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle ≤ 2.0%
- (2) Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1A ; I_{rr} = 0.25 A

RATING AND CHARACTERISTIC CURVES (MUR440 - MUR460)

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



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
 2. Rise time = 10 ns max., Source Impedance = 50 ohms.
 3. All Resistors = Non-inductive Types.

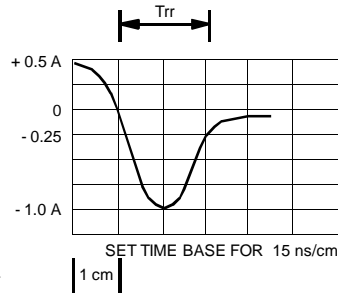


FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

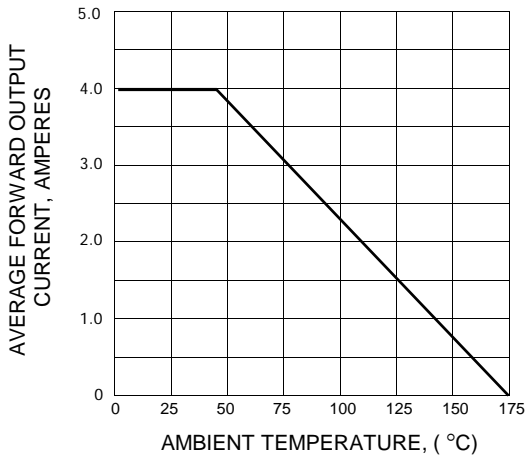


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

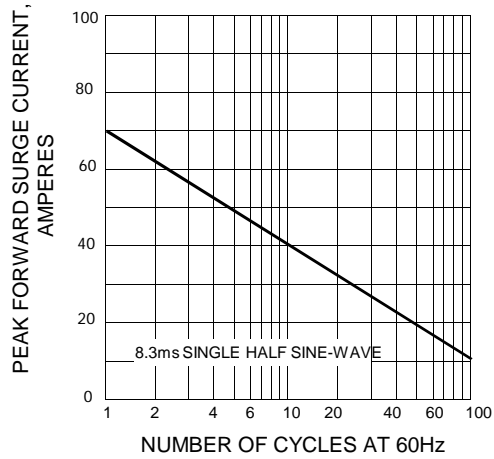


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

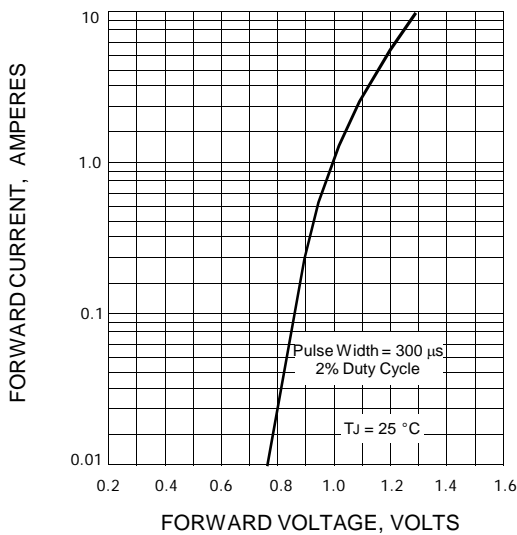


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

