



MUR410 - MUR420

ULTRAFAST RECOVERY RECTIFIERS DIODES

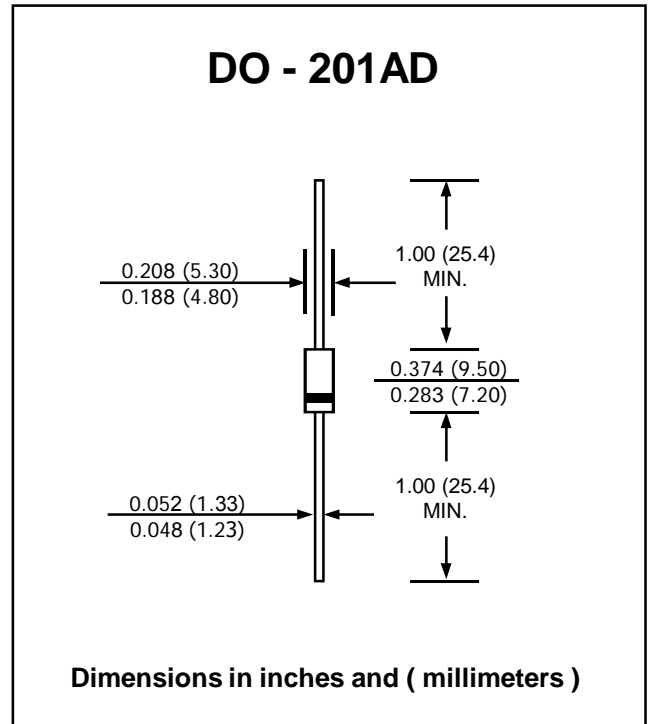
PRV : 100 - 200 Volts
Io : 4.0 Amperes

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * 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 : 1.21 grams



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%.

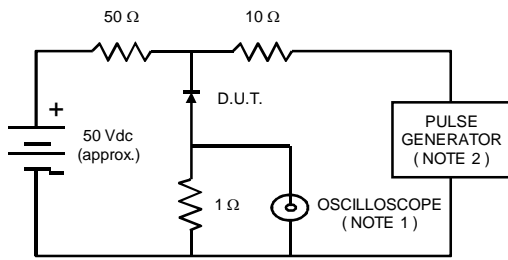
RATING	SYMBOL	MUR410	MUR415	MUR420	UNIT
Maximum Peak Reverse Voltage	V _{RM}	100	150	200	V
Maximum RMS Voltage	V _{RMS}	70	105	140	V
Maximum Reverse Voltage	V _R	100	150	200	V
Maximum Average Forward Current Ta = 80 °C	I _{F(AV)}	4.0			A
Maximum Non-repetitive Peak Forward Surge Current	I _{FSM}	125			A
Maximum Peak Forward Voltage at I _F = 4 A	V _F	0.89			V
Maximum Reverse Current at V _R = V _{RM} T _j = 25 °C	I _R	5.0			µA
Maximum Reverse Current at V _R = V _{RM} T _j = 150 °C	I _{R(H)}	150			µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	25			ns
Junction Temperature Range	T _J	-65 to + 175			°C
Storage Temperature Range	T _{STG}	- 65 to + 175			°C

Note:

(1) Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1A ; I_{RR} = 0.25 A

RATING AND CHARACTERISTIC CURVES (MUR410 - MUR420)

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.

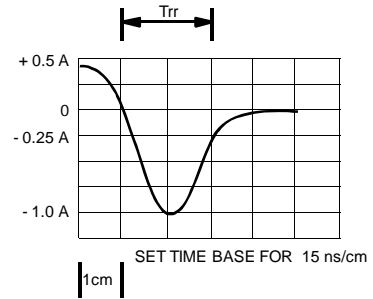


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

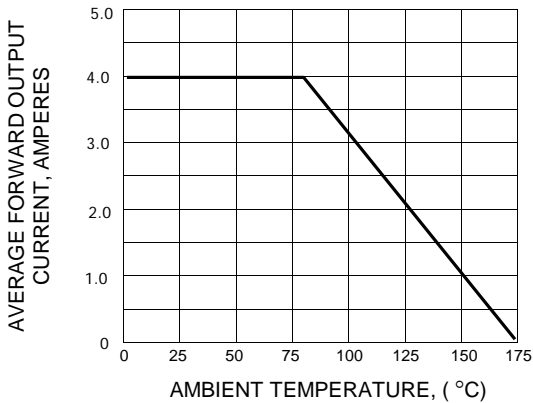


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

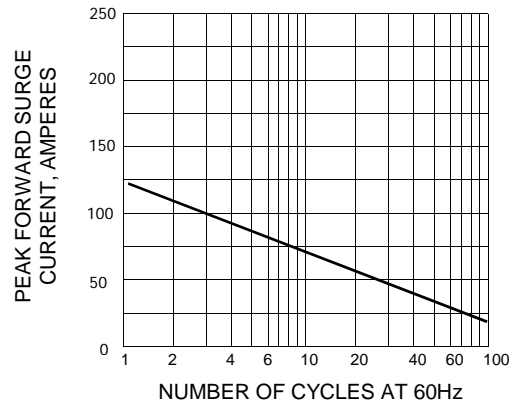


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

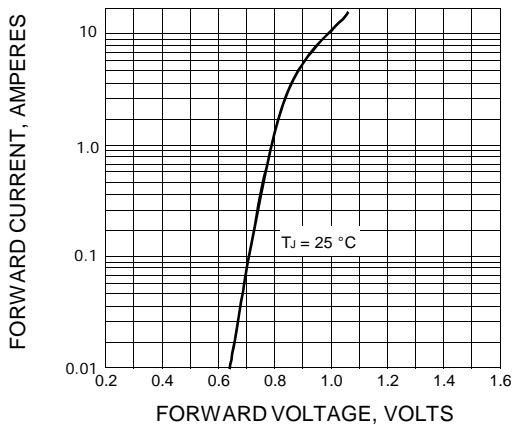


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

