

Features

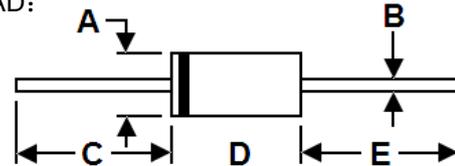
- * Low Forward Voltage Drop
- * High Current Capability
- * High Reliability
- * High Surge Current Capability
- * Ultrafast Recovery Time for High Efficiency



RoHS
COMPLIANT

Package Outline Dimensions

DO-201AD:



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.8	5.3	0.189	0.209
B	1.2	1.3	0.047	0.051
C	25.4	-	1.0	-
D	7.2	9.6	0.283	0.378
E	25.4	-	1.0	-

Mechanical Data

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

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%.

Type Number	Symbols	MUR420	MUR440	MUR460	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS Voltage	V_{RMS}	140	280	420	V
Maximum D.C Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	4			A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	125			A
Maximum Instantaneous Forward Voltage at 4.0A (Note1)	V_F	0.89	1.28		V
Maximum D.C Reverse Current @ $T_J=25^{\circ}C$ at Rated D.C Blocking Voltage @ $T_J=125^{\circ}C$	I_R	5 150	10 250		μA
Maximum Reverse Recovery Time(Note2)	T_{rr}	25	50		nS
Typical Junction Capacitance(Note3)	C_J	65			pF
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	15 28			$^{\circ}C/W$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 + 175			$^{\circ}C$

Note:1、 Pulse Test: $t_p=300 \mu S$, Duty Cycle $\leq 1\%$ 2、 Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$.

3、 Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

Ratings and Characteristic Curves

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

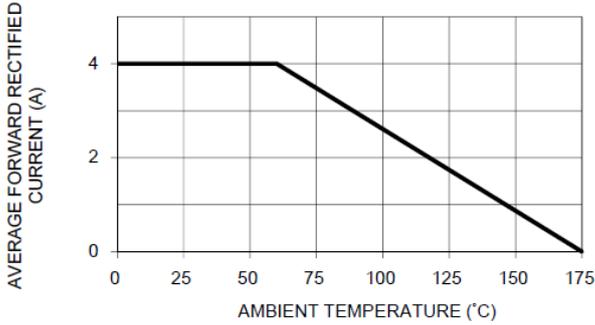


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

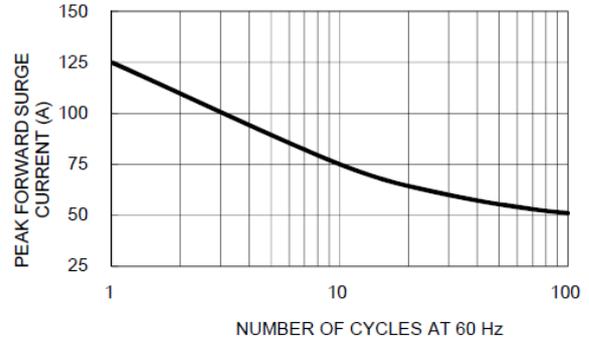


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

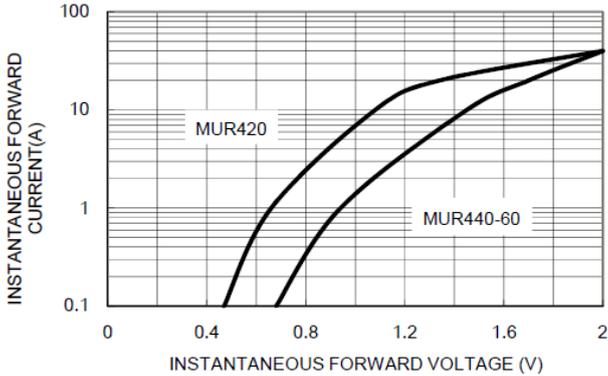


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

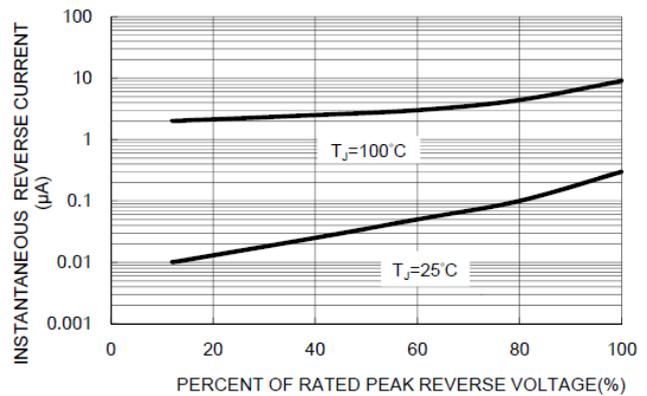


FIG. 5 TYPICAL JUNCTION CAPACITANCE

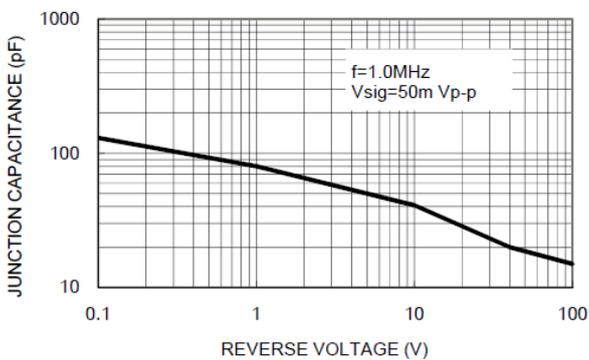
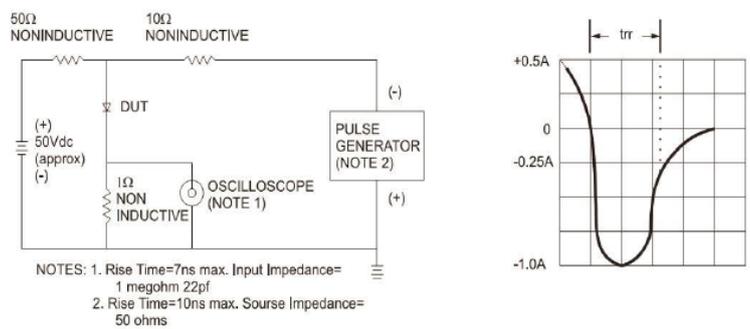


FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





MUR420 THRU MUR460

4.0 Amps. Ultra Fast Rectifiers

Ordering Information

Part No.	Package	Packing
MUR420~MUR460	DO-201AD	0.8K/AMMO box
MUR420~MUR460	DO-201AD	1.2K/AMMO box
MUR420~MUR460	DO-201AD	1.2K/13" Paper reel
MUR420~MUR460	DO-201AD	0.5K/Bulk packing