

MUR460D

**SUPER FAST
GLASS PASSIVATED RECTIFIERS**

**REVERSE VOLTAGE – 600Volts
FORWARD CURRENT – 4.0 Amperes**

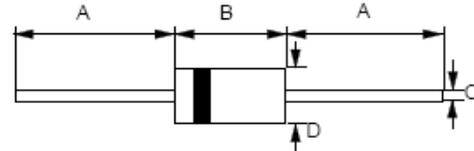
FEATURES

- Glass passivated chip
- Super fast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Qualified according to AEC-Q101 Rev_C
- Plastic material has UL flammability classification 94V-0
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. “Green” Device (Note 3)**

MECHANICAL DATA

- Package: JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight: 0.04 ounce, 1.1 grams
- Mounting position: Any

DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	7.30	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	MUR460D			UNIT		
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600			V		
Maximum DC Blocking Voltage	V_{DC}	600			V		
Average Rectified Output Current @TL=120°C	$I_{F(AV)}$	4.0			A		
Peak Forward Surge Current 8.3ms single half sine-wave, $T_j=25^\circ\text{C}$	I_{FSM}	110			A		
I^2t Rating for fusing ($3\text{ms} \leq t \leq 8.3\text{ms}$)	I^2t	50			A ² S		
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +175			°C		
PARAMETER	TEST CONDITIONS		SYMBOL	Min.	Typ.	Max.	UNIT
Forward Voltage (4)	$I_F=4\text{A}$	$T_j=25^\circ\text{C}$	V_F	---	---	1.28	V
Maximum DC Reverse Current	$V_R=600\text{V}$	$T_j=25^\circ\text{C}$ $T_j=150^\circ\text{C}$	I_R	---	---	10 250	uA
Reverse Recovery Time (Note4)			T_{rr}	---	---	50	ns
Single pulse avalanche energy @15mH			E_{AS}	---	---	10.8	mJ
THERMAL CHARACTERISTIC			SYMBOL	Typical			UNIT
Typical Junction Capacitance per element (Note 5)			C_j	40			pF
Typical thermal Resistance, Junction to Lead (Note 6)			$R_{\theta JL}$	11			°C/W

Note:

REV.-3, Nov-2021, KDFG10

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured with $I_F=0.5\text{A}, I_R=1\text{A}, I_{RR}=0.25\text{A}$.
5. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
6. Measured point from body 1mm by lead.

RATING AND CHARACTERISTIC CURVES
MUR460D

FIG.1- FORWARD CURRENT DERATING CURVE

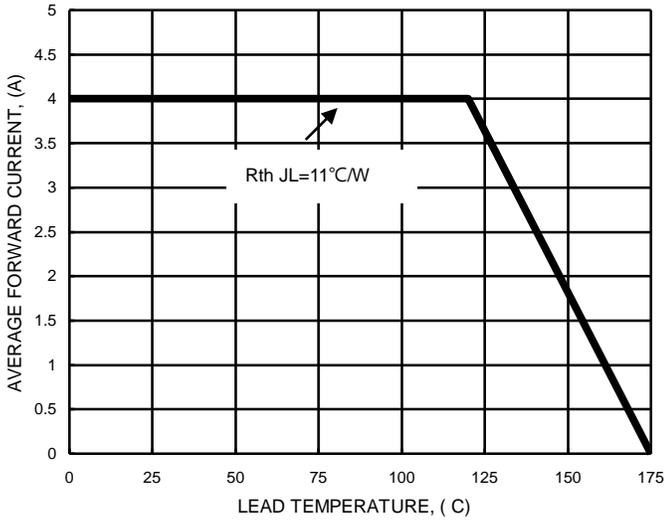


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

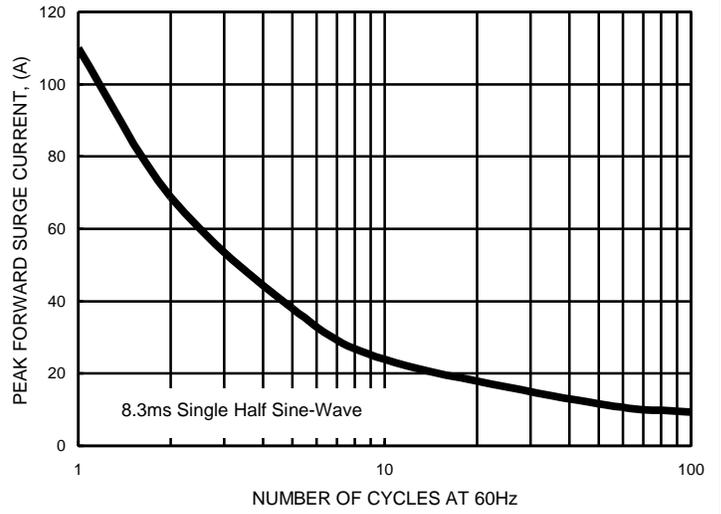


FIG.3- TYPICAL FORWARD CHARACTERISTICS

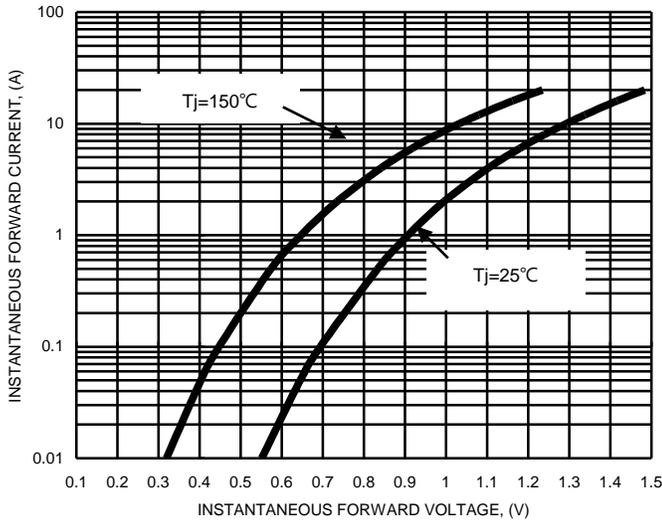


FIG.4- TYPICAL JUNCTION CAPACITANCE

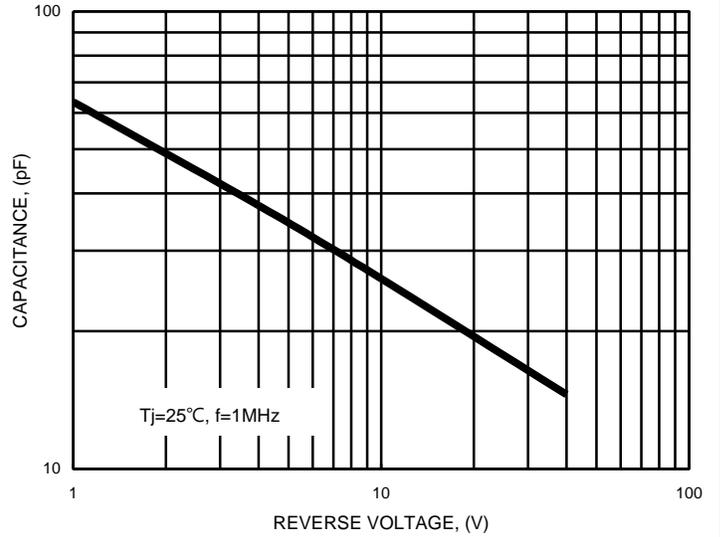


FIG.5- TYPICAL REVERSE CHARACTERISTICS

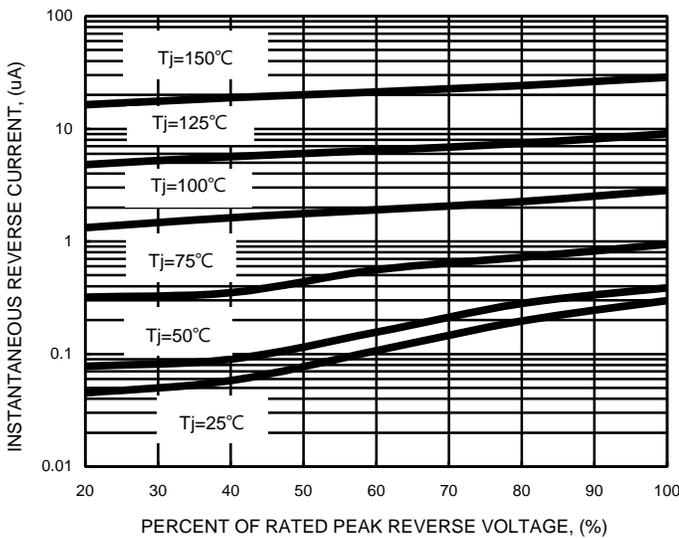
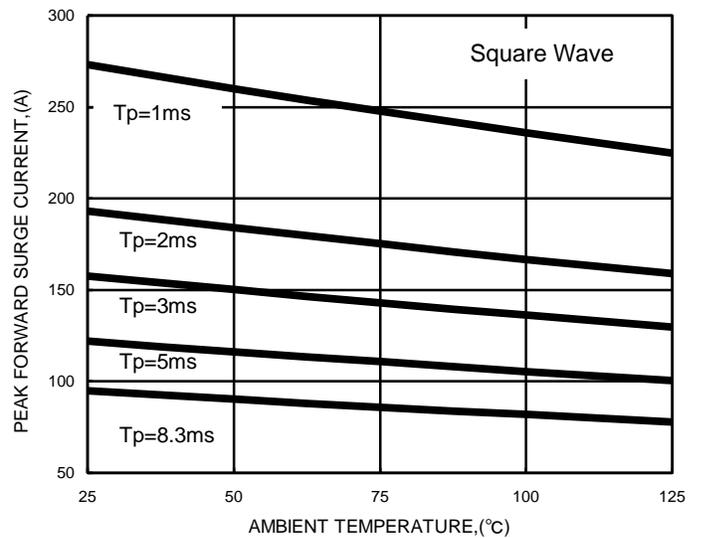


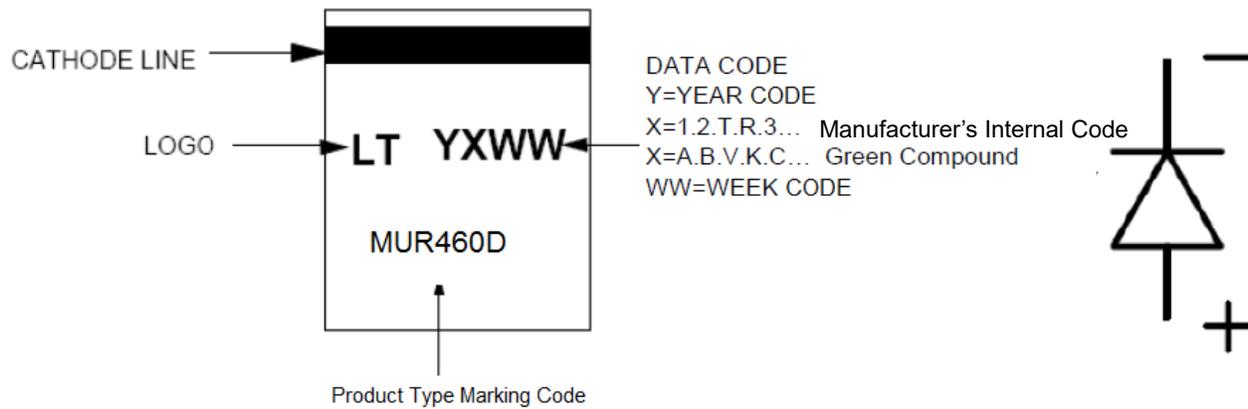
FIG.6 NON-REPETITIVE SURGE CURRENT



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
MUR460D	DO-201AD	1200	Tape & Reel
MUR460D_FR	DO-201AD	500	Bulk Box

Marking Information :



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