

**SUPER FAST
GLASS PASSIVATED RECTIFIER**

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

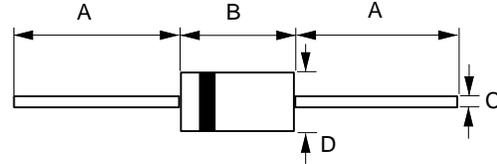
FEATURES

- Glass passivated chip
- Super fast switching time for high efficiency
- Low forward drop and high current capability
- Low reverse leakage current
- Qualified according to AEC-Q101 Rev_C
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic
- Case Material: molding compound, UL flammability classification 94V-0
- Polarity: Color band denotes cathode
- Weight: 1.0675 grams(Approximate)
- Mounting Position: Any

DO-201AD



DO-201AD		
DIM.	MIN.	MAX.
A	25.40	--
B	7.30	9.50
C	1.20Ø	1.30Ø
D	4.80Ø	5.30Ø
All dimension in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum Average rectified output current per device	$I_{F(AV)}$	4.0	A
Peak forward surge current single half sine-wave	I_{FSM}	110 220	A
Peak Repetitive Forward Current (Square wave, 20KHz, duty cycle 50%, $T_L=120^\circ\text{C}$)	I_{FRM}	4.2	A
I^2t Rating for fusing ($3\text{ms} \leq t \leq 8.3\text{ms}$)	I^2t	50	A^2S
Operating and storage temperature range	T_J, T_{STG}	-55 to +175	$^\circ\text{C}$

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	MAX	UNIT
Forward voltage (Note4)	$I_F = 4\text{A}$ $T_J = 25^\circ\text{C}$	V_F	1.28	V
Leakage current	$V_R = 600\text{V}$ $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_R	10 250	μA
Typical junction capacitance (Note5)		C_T	40	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note6)	R_{thJL} R_{thJC} R_{thJA}	11 8 30	$^\circ\text{C/W}$

DYNAMIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	MAX	Unit
Reverse recovery time	$I_F = 0.5\text{A}, I_{rr} = 0.25\text{A}, I_R = 1.0\text{A}$ $T_J = 25^\circ\text{C}$	t_{rr}	50	nS

Note :

- (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) 300us pulse width, 2% duty cycle.
- (5) Measured at 1.0MHz and applied reverse voltage of 4.0V DC
- (6) Measured point from body 1mm by lead.

REV. 14 , Oct-2021, KDFG09

RATING AND CHARACTERISTIC CURVES
MUR460

FIG.1- FORWARD CURRENT DERATING CURVE

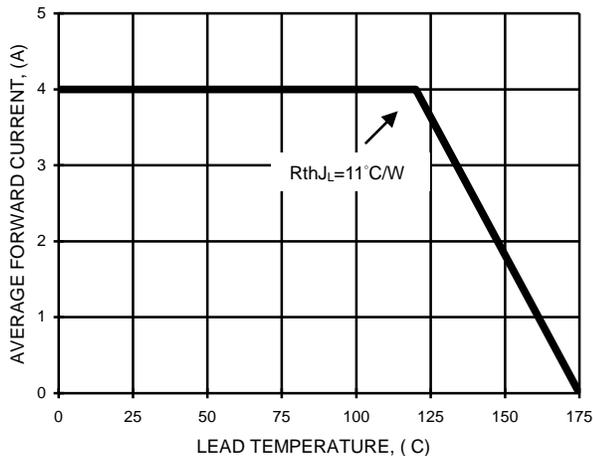


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

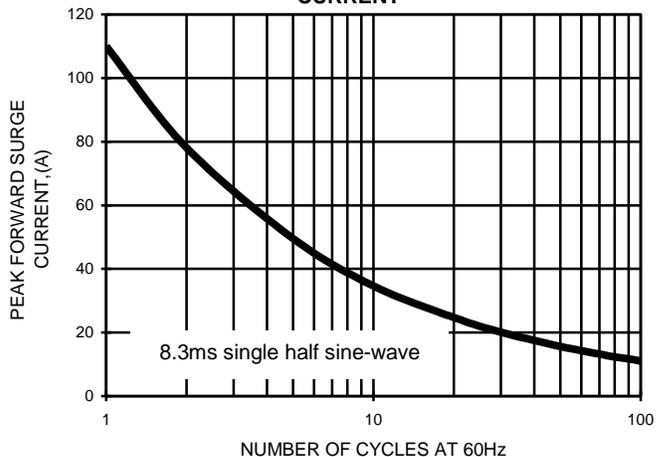


FIG.3- TYPICAL FORWARD CHARACTERISTICS

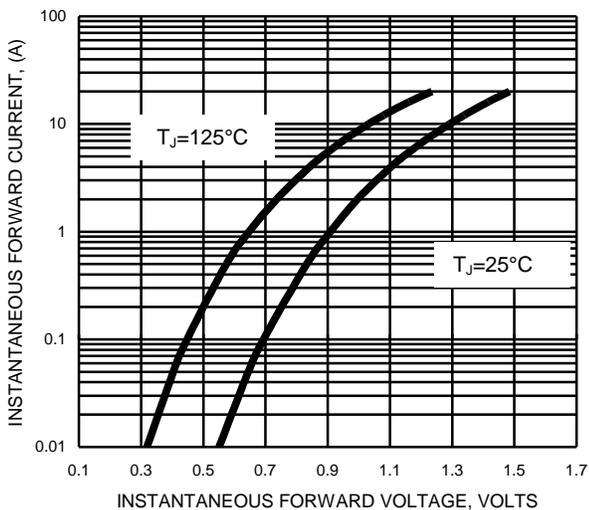


FIG.4- TYPICAL JUNCTION CAPACITANCE

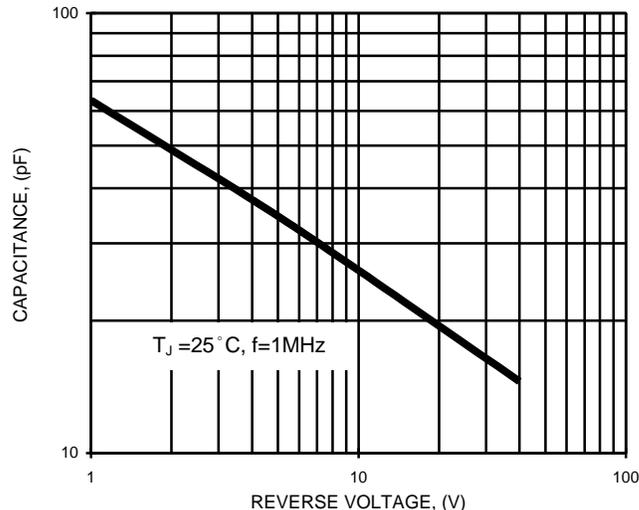


FIG.5- TYPICAL REVERSE CHARACTERISTICS

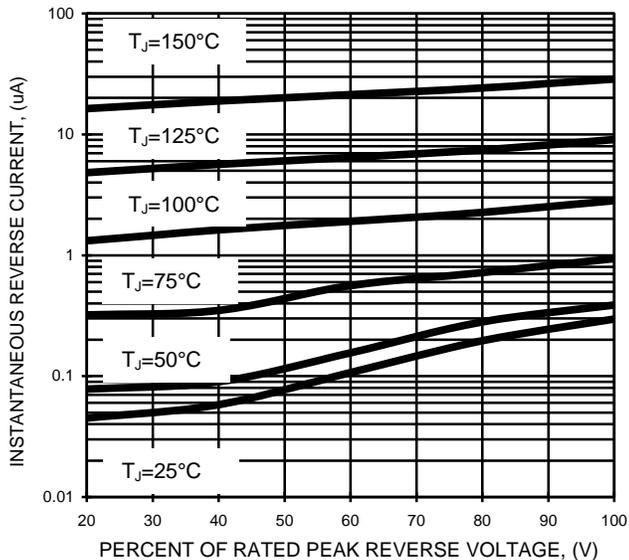
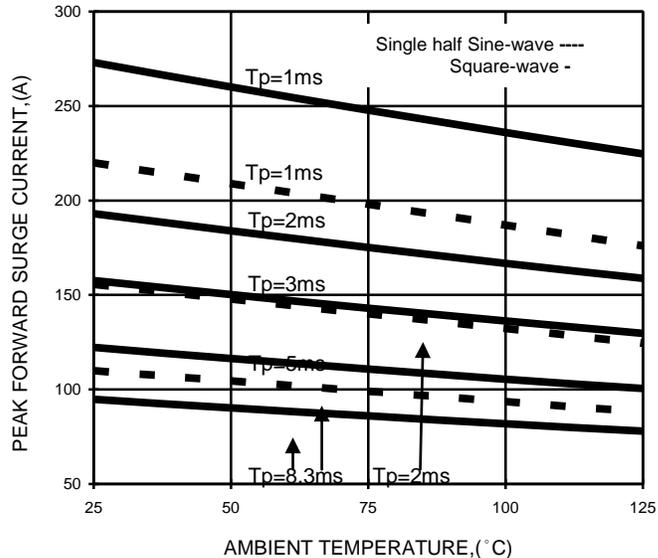


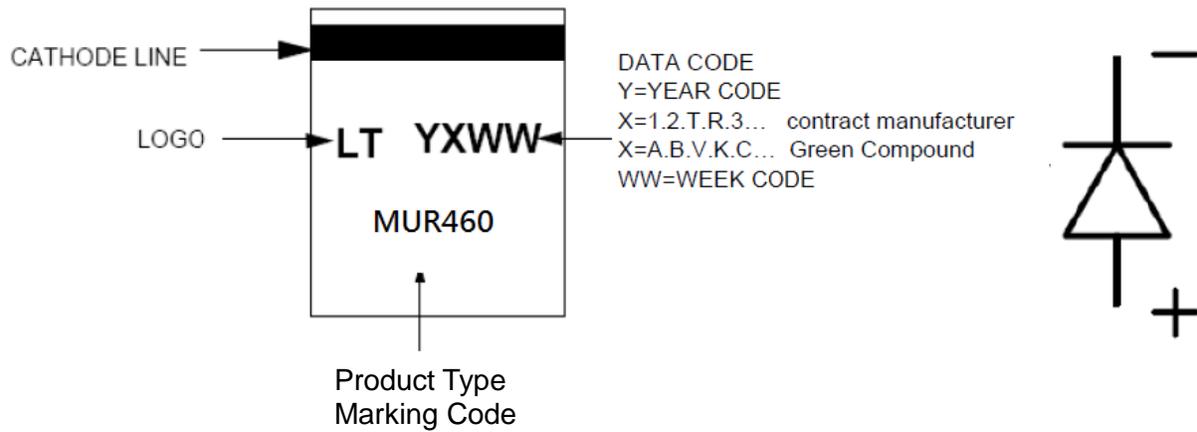
FIG.6 NON-REPETITIVE SURGE CURRENT



Ordering Information :

Part Number	Package	Packing	
		Quantity	Carrier
MUR460_T	DO-201AD	1200	Tape & Reel
MUR460-A52	DO-201AD	1000	Ammo Box
MUR460-E	DO-201AD	500	Bulk Box

Marking Information :



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