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A Product Line of Diodes Incorporated | LITE-ON SEMICONDUCTOR

MUR460

SUPER FAST GLASS PASSIVATED RECTIFIER

REVERSE VOLTAGE – 600 Volts FORWARD CURRENT – 4.0 Amperes

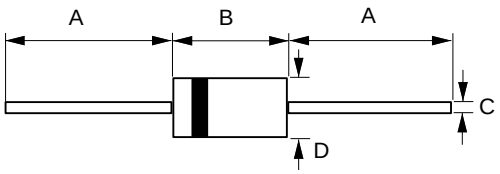
FEATURES

- 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	@T_L = 120°C	$I_{F(AV)}$	4.0	A
Peak forward surge current single half sine-wave	@tp=8.3ms @tp=1ms	I_{FSM}	110 220	A
Peak Repetitive Forward Current (Square wave, 20KH_Z , duty cycle 50%, T_L=120°C)		I_{FRM}	4.2	A
I^2t Rating for fusing (3ms ≦ t ≦ 8.3ms)		I^2t	50	A^2S
Operating and storage temperature range		T_J ,T_{STG}	-55 to +175	°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION		SYMBOL	MAX	UNIT
Forward voltage (Note4)	I_F = 4A	T_J = 25°C	V_F	1.28	V
Leakage current	V_R = 600V	T_J = 25°C T_J = 125°C	I_R	10 250	uA
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	°C/W

DYNAMIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION		SYMBOL	MAX	Unit
Reverse recovery time	I_F= 0.5A, I_{rr}= 0.25A, I_R =1.0A	T_J=25°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, KDGF09

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RATING AND CHARACTERISTIC CURVES
MUR460

FIG.1- FORWARD CURRENT DERATING CURVE

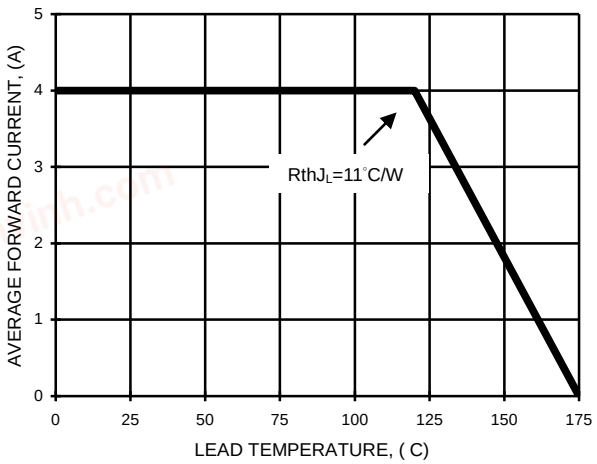


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

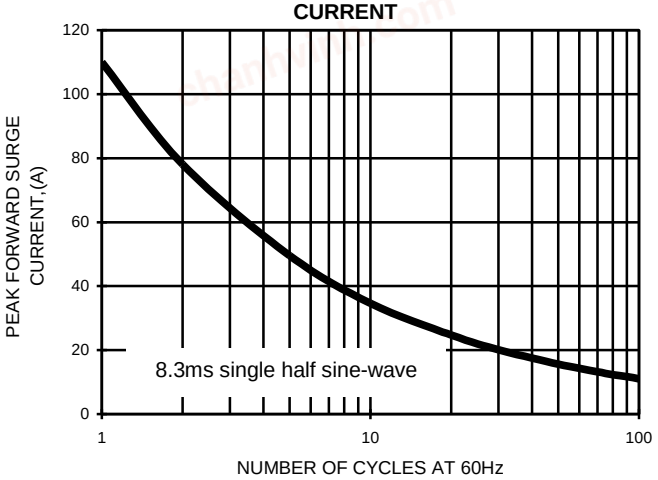


FIG.3- TYPICAL FORWARD CHARACTERISTICS

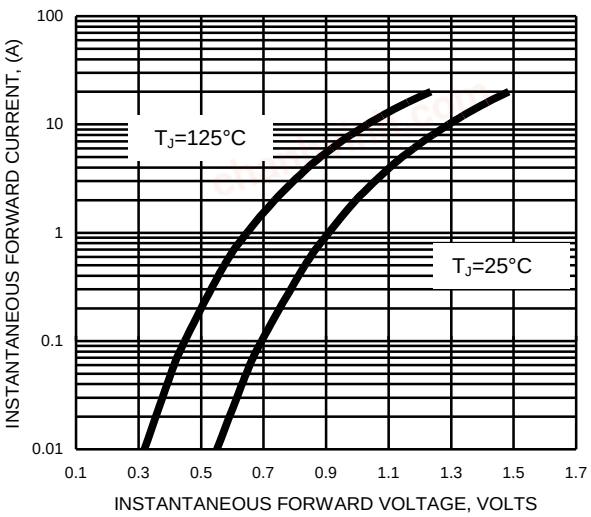


FIG.4- TYPICAL JUNCTION CAPACITANCE

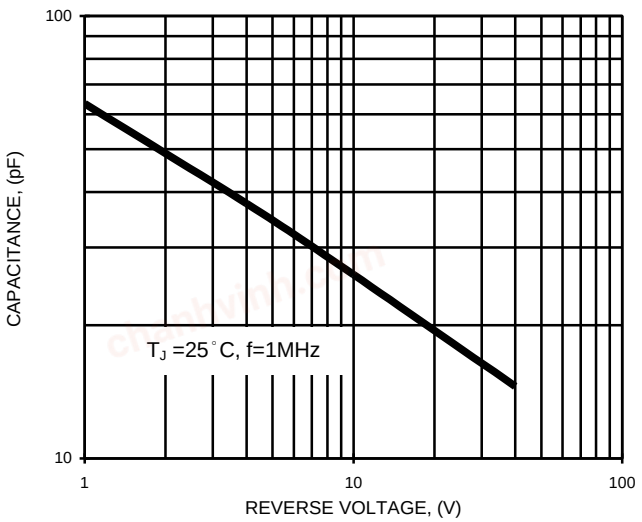


FIG.5- TYPICAL REVERSE CHARACTERISTICS

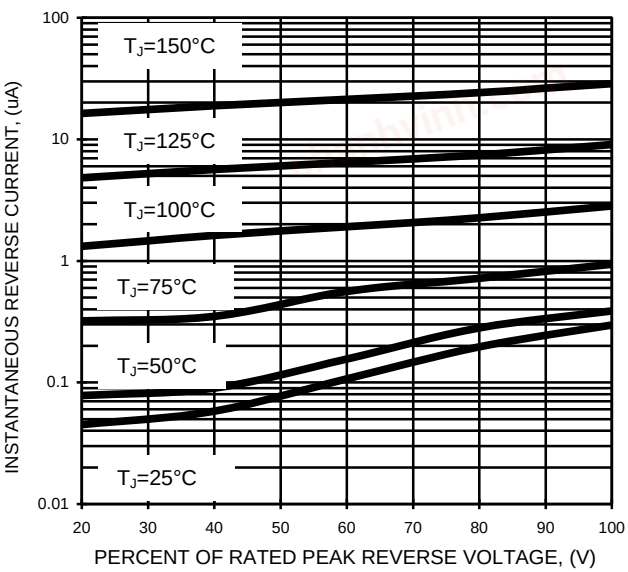
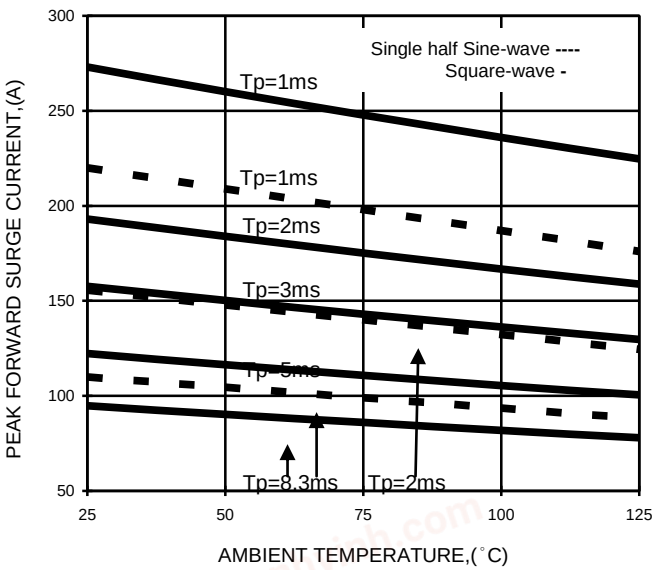


FIG.6 NON-REPETITIVE SURGE CURRENT

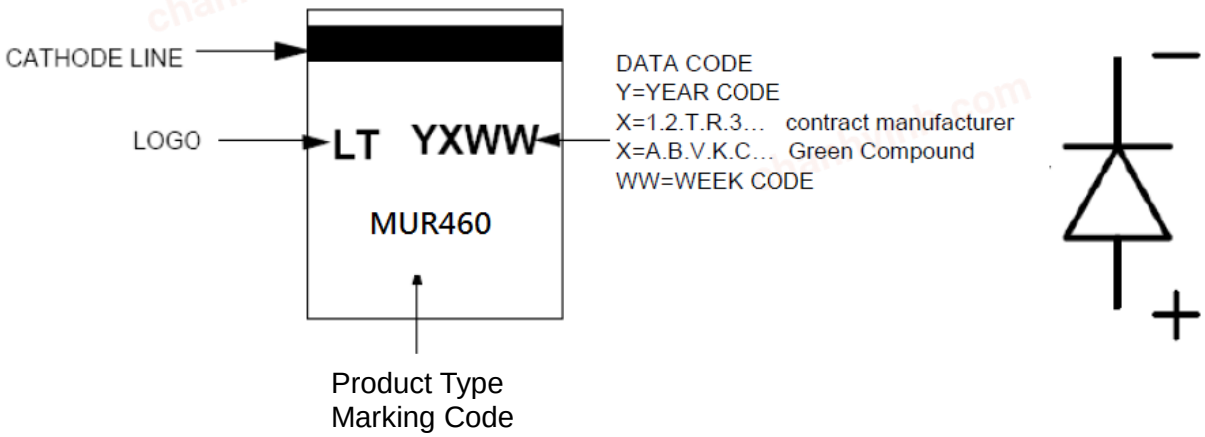


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Ordering Information :

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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