# LITEON LITE-ON SEMICONDUCTOR

# **MUR460**

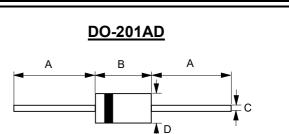
### SUPER FAST GLASS PASSIVATED RECTIFIER

### 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

### **MECHANICAL DATA**

- Case: JEDEC DO-201AD molded plastic
- Case Material: molding compound, UL flammability classification 94V-0
- Polarity: Color band denotes cathode
- Weight: 0.04 ounces, 1.0675 grams(Approximate)
- Mounting Position: Any



**REVERSE VOLTAGE – 600 Volts** 

**FORWARD CURRENT – 4.0 Amperes** 

DO-201AD			
DIM.	MIN.	MAX.	
Α	25.40		
В	7.30	9.50	
С	1.20Ø	1.30Ø	
D	4.80Ø	5.30Ø	
All dime	nsion in m	nillimeter	

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

### ABSOLUTE RATINGS

PARAMETER   Maximum repetitive peak reverse voltage   Maximum DC blocking voltage		SYMBOL V <sub>RRM</sub>	<b>VALUE</b> 600	UNIT
				V
		V <sub>DC</sub>	600	V
Maximum Average rectified output current per device	@T∟ = 120°C	F(AV)	4.0	А
Peak forward surge current single half sine-wave	@tp=8.3ms @tp=1ms	IFSM	110 220	А
Peak Repetitive Forward Current (Square wave, 20KHz , duty cycle 50%, TL=120°C)		I <sub>FRM</sub>	4.2	А
I <sup>2</sup> t Rating for fusing (3ms $\leq$ t $\leq$ 8.3ms)		l²t	50	A <sup>2</sup> S
Operating and storage temperature range		T <sub>J</sub> ,T <sub>STG</sub>	-55 to +175	°C

### **TEST CONDITION** SYMBOL PARAMETER MAX UNIT Forward voltage (Note1) $I_F = 4A$ T<sub>J</sub> = 25°C $\mathsf{V}_\mathsf{F}$ 1.28 V $T_1 = 25^{\circ}C$ 10 Leakage current V<sub>R</sub>= 600V $I_R$ uA <u>T<sub>J</sub> = 125°C</u> 250 CJ pF Typical junction capacitance (Note2) 40

### THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	ТҮР	UNIT
	RthJ∟	11	
Typical thermal resistance (Note3)	RthJc	8	°C/W
	RthJa	30	

### DYNAMIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION		SYMBOL	МАХ	Unit
Reverse recovery time	I <sub>F</sub> = 0.5A, I <sub>rr</sub> = 0.25A, I <sub>R</sub> =1.0A	TJ=25°C	T <sub>RR</sub>	50	nS
Note : REV. 12 ,Oct-2019, KDGF09					DGF09

(1) 300us pulse width, 2% duty cycle.

(2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC

(3) Measured point from body 1mm by lead.

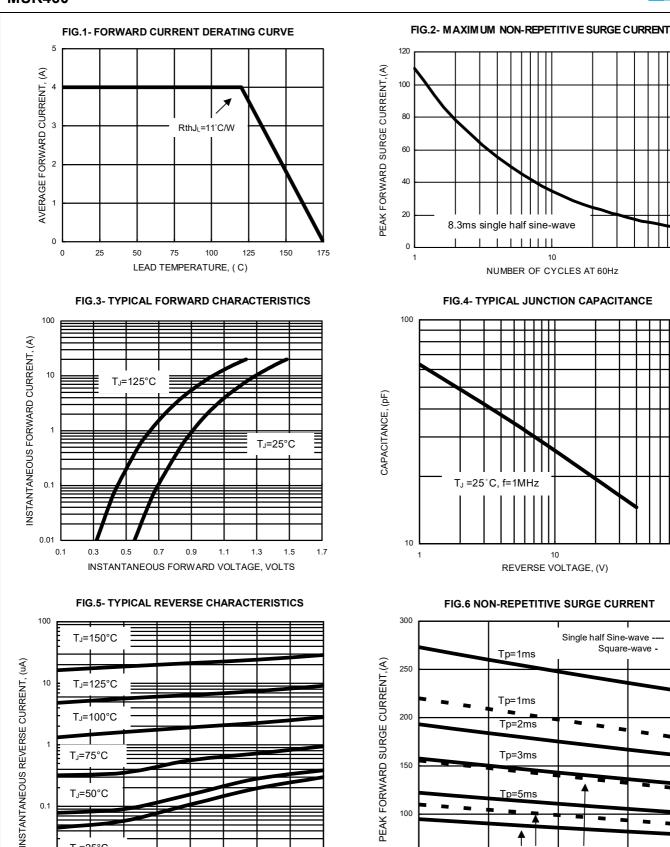
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### **RATING AND CHARACTERISTIC CURVES MUR460**

## TEON

100

100



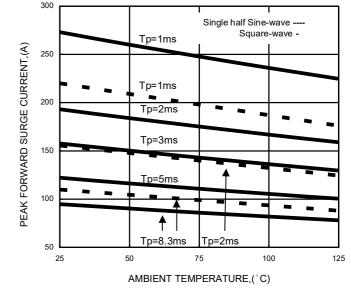


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REVERSE VOLTAGE, (V)

11

10



TJ=50°C

TJ=25°C

30

40

50

60

PERCENT OF RATED PEAK REVERSE VOLTAGE, (V)

70

80

90

100

0.1

0.01

20



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