### LITEON LITE-ON SEMICONDUCTOR

#### 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

#### **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



#### <u>DO-201AD</u>



DO-201AD					
DIM.	DIM. MIN.				
Α	25.40				
В	7.30	9.50			
С	1.20Ø	1.30Ø			
D	4.80Ø	5.30Ø			
All din	All dimension in millimeter				

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwis e specified.

#### **ABSOLUTE RATINGS**

PARAMETER		SYMBOL	VALUE	UNIT			
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	600	V			
Maximum DC blocking voltage		V <sub>DC</sub>	600	V			
Maximum Average rectified	output current per device	@T <sub>L</sub> = 120℃	I <sub>F(AV)</sub>	4.0	А		
Peak forward surge current single half sine-wave @tp=8.3ms @tp=1ms		I <sub>FSM</sub>	110 220	А			
Peak Repetitive Forward Current (Square wave, 20KH <sub>z</sub> , duty cycle 50%, T <sub>L</sub> =120℃)			I <sub>FRM</sub>	4.2	А		
${\sf I}^2 t$ Rating for fusing (3ms $\leq t \leq$ 8.3ms)		l <sup>2</sup> t	50	A <sup>2</sup> S			
Operating and storage temperature range		T <sub>J</sub> ,T <sub>STG</sub>	-55 to +175	C			
STATIC ELECTRICAL CHARACTERISTICS							
PARAMETER	TEST CONDITION		SYMBOL	MAX	UNIT		
E I . It	1 14	<b>T</b> 0500		1 00			

					-
Forward voltage (Note1)	$I_F = 4A$	T <sub>J</sub> = 25℃	V <sub>F</sub>	1.28	V
Leakage current	V <sub>R</sub> = 600V	T」= 25℃ T」= 125℃	I <sub>R</sub>	10 250	uA
Typical junction capacitance (Note2)		C.	40	рF	

#### THERMAL CHARACTERISTICS

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

#### DYNAMIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION		SYMBOL	MAX	Unit
Reverse recovery time	I <sub>F</sub> = 0.5A, I <sub>rr</sub> = 0.25A, I <sub>R</sub> =1.0A	TJ=25℃	T <sub>RR</sub>	50	nS
Note :				REV. 10 , Aug-2015, KI	OGF09

(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.

## **MUR460**

## RATING AND CHARACTERISTIC CURVES MUR460

# LITEON





FIG.5- TYPICAL REVERSE CHARACTERISTICS





FIG.4- TYPICAL JUNCTION CAPACITANCE



#### FIG.6 NON-REPETITIVE SURGE CURRENT



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