

MUR1660

**Green** Products

Technical Data Data Sheet N0307, Rev. -

# **MUR1660 ULTRAFAST RECTIFIER**

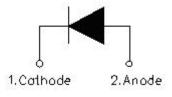
#### **Applications:**

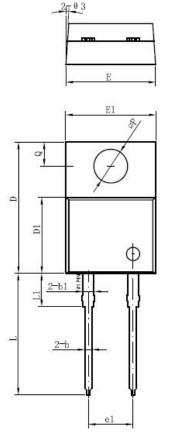
- Switching Power Supply
- Power Switching Circuits
- General Purpose

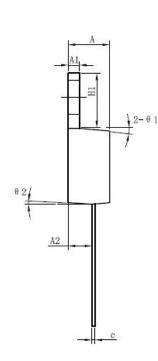
#### Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

#### Mechanical Dimensions: In mm







Symbol	Dimensions in millimeters			
Symbol	Min.	Typical	Max.	
Α	4.55	4.70	4.85	
A1	1.17	1.27	1.37	
A2	2.59	2.69	2.89	
b	0.71	0.81	0.96	
b1		1.27		
С	0.36	0.38	0.61	
D	14.64	14.94	15.24	
D1	8.55	8.07	8.85	
Е	10.01	10.16	10.31	
E1	9.98	10.18	10.38	
e1		5.08		
H1	6.04	6.24	6.44	
L	13.00	13.86	14.08	
L1		3.80		
ΦΡ	3.74	3.84	4.04	
Q	2.54	2.74	2.94	
Θ1		5°		
Θ2		<b>4</b> °		
Θ3		4°		

## TO-220AC

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#### Marking Diagram:



Where XXXXX is YYWWL

MUR	= Device Type
16	= Forward Current (16A)
60	= Reverse Voltage (600V)
SSG	= SSG
ΥY	= Year
WW	= Week
L	= Lot Number

Cautions: Molding resin Epoxy resin UL:94V-0

### **Ordering Information:**

Device	Package	Shipping
MUR1660	TO-220AC (Pb-Free)	50pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

#### **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	-	600	V
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle @Tc=100°C, rectangular wave form	16	A
Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3ms, Half Sine pulse	250	A

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#### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop*	V <sub>F1</sub>	@ 16A, Pulse, T <sub>J</sub> = 25°C	1.7	V
	V <sub>F2</sub>	@ 16A, Pulse, T」= 150°C	1.5	V
	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub>	5	μA
Reverse Current*		T <sub>J</sub> = 25°C		
	I <sub>R2</sub>	@V <sub>R</sub> = 0.8 V <sub>R</sub>	1	mA
		T <sub>J</sub> = 125°C		
Reverse Recovery Time	trr	$I_F$ =500mA, $I_R$ =1A,and $I_m$ =250mA	50	ns

\* Pulse width < 300  $\mu s, \ duty \ cycle < 2\%$ 

### Thermal-Mechanical Specifications:

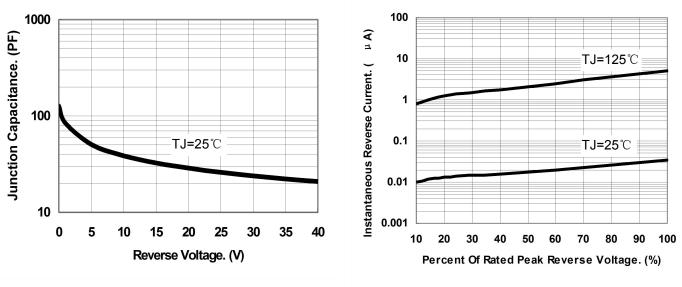
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	Rejc	DC operation	1.5	°C/W
Approximate Weight	wt	-	1.6	g
Case Style		TO-220AC		



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**Fig.1-Typical Junction Capacitance** 



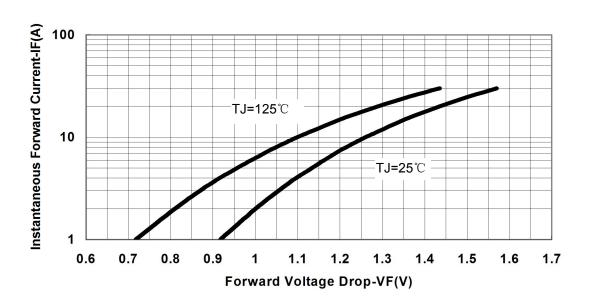


Fig.3-Typical Forward Voltage Drop Characteristics



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