**Green Products** 

# **MUR460AX ULTRAFAST RECTIFIERS**

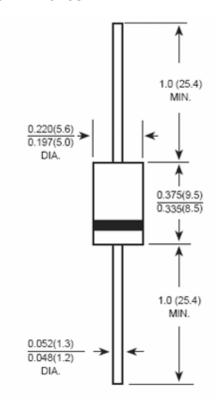
## **Applications:**

- Switching Power Supply
- Power Switching Circuits
- General Purpose

### Features:

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Super Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 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 Inches / mm



**DO-201AD** 



**Green Products** 

## **Marking Diagram:**



#### Where XXXXX is YYWWL

MUR = Device Type

4 = Forward Current (4A) 60 = Reverse Voltage (600V)

AX = Configuration

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

## **Ordering Information:**

Device	Package	Shipping	
MUR460AX	DO-201AD	1250nes / tons	
	(Pb-Free)	1250pcs / tape	

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

<sup>•</sup> FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •



**Green Products** 

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	MUR460AX	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		$egin{array}{c} oldsymbol{V_{RWM}} \ oldsymbol{V_{R}} \end{array}$	600	V
RMS Reverse Voltage		$V_{R(RMS)}$	420	V
Average Rectified Output Current	@T <sub>A</sub> = 105°C	lo	4.0	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I <sub>FSM</sub>	150	А
Forward Voltage (per element)	@I <sub>F</sub> = 4.0A	$V_{FM}$	1.7	V
	DT <sub>A</sub> = 25°C DT <sub>A</sub> = 100°C	I <sub>RM</sub>	5.0 500	μΑ
Maximum Reverse Recovery Time (Note 1)		Trr	50	ns
Typical Junction Capacitance (Note 2)		CJ	80	pF
Max. Voltage Rate of Change		dv/dt	10,000	V/µs
Typical Thermal Resistance Junction to Ambient (Note 3)		$R_{ heta JA}$	25	K/W
Storage Temperature Range		$T_{J,}T_{STG}$	-55 to +150	°C
Approximate Weight		wt	1.02	g
Case Style		DO-201AD		

Note: 1. Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A

- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
- 3. Mount on Cu-Pad Size 16mm×16mm on P.C.B.

<sup>•</sup> Weigi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 📱 (86) 25-87123907 •

<sup>•</sup> FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •

**Green Products** 

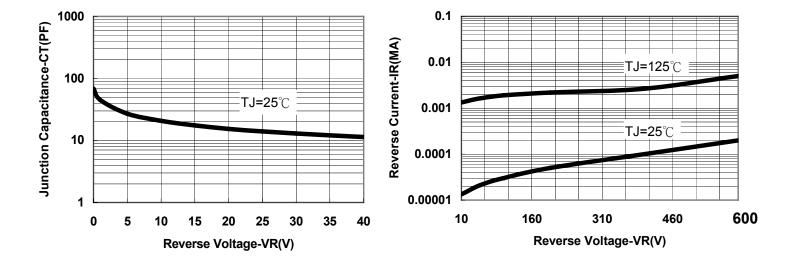


Fig.1-Typical Junction Capacitance

Fig.2-Typical Reverse Characteristics

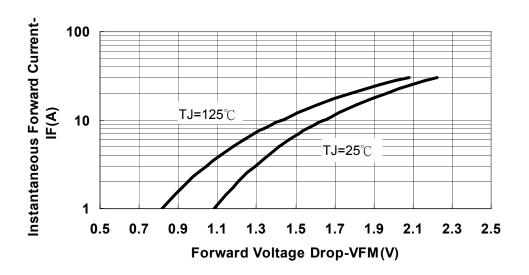


Fig.3-Typical Instantaneous Forward Voltage

<sup>•</sup> Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 (86) 25-87123907 •

<sup>•</sup> FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •





**Green Products** 

#### DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..