Technical Data Data Sheet N0270, Rev. - **Green Products** 

# MUR540AX ULTRAFAST PLASTIC RECTIFIER

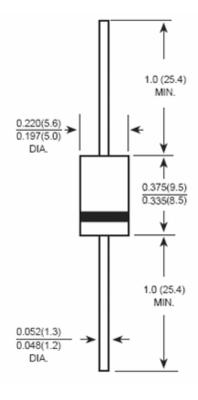
### **Applications:**

- 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** 

<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 •



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# **Marking Diagram:**

Where XXXXX is YYWWL



MUR = Device Type

5 = Forward Current (5A) 40 = Reverse Voltage (400V)

AX = Configuration

SSG = SSG YY = Year WW = Week L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

# **Ordering Information:**

Device	Package	Shipping	
MUR540AX	DO-201AD	1250mag / tamp	
	(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.

# **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	400	V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle @TC =105℃ rectangular wave form	5.0	Α
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	50Hz, Half Sine wave	80	Α

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## **Electrical Characteristics:**

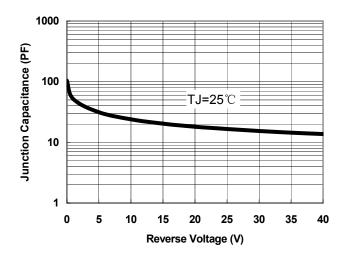
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F}$	@ I <sub>F</sub> = 5A, Pulse, T <sub>J</sub> = 25℃	1.25	V
Max. Reverse Current	I <sub>R1</sub>	$@V_R = \text{rated VR}$ $T_J = 25^{\circ}C$	10	μA
	I <sub>R2</sub>	@V <sub>R</sub> = rated VR T <sub>J</sub> = 125℃	500	μA
Max. Reverse Recovery Time	t <sub>rr</sub>	$I_F$ =500mA, $I_R$ =1A,and $I_m$ =250mA	50	ns

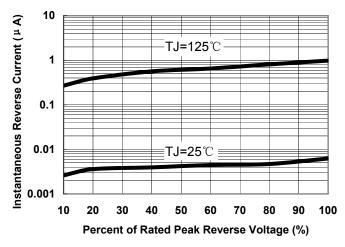
 $<sup>^*</sup>$  Pulse width < 300  $\mu$ s, duty cycle < 2%

## **Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-55 to +150	$^{\circ}$
Max. Storage Temperature	T <sub>stg</sub>	-	-55 to +150	$^{\circ}$
Maximum Thermal Resistance Junction to Case	$R_{ ext{ hetaJC}}$	-	3.5	°C /W
Approximate Weight	wt	-	1.02	g
Case Style		DO-201AD		

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**Fig.1-Typical Junction Capacitance** 

Fig.2-Typical Reverse Characteristics

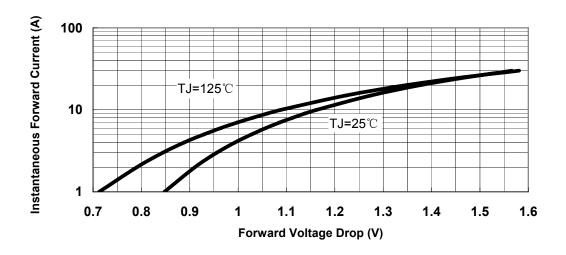


Fig.3-Typical Instantaneous Forward Voltage Characteristics

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