

## MUR540AX ULTRAFAST PLASTIC RECTIFIER

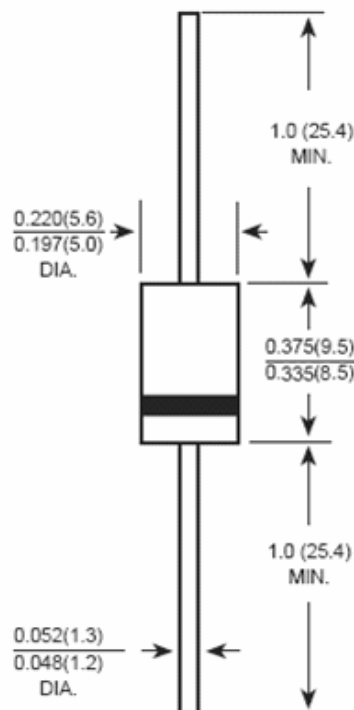
### Applications:

- 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**

Technical Data  
Data Sheet N0270, Rev. -

**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 (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
Average Forward Current	$I_{F(AV)}$	50% duty cycle @TC =105°C rectangular wave form	5.0	A
Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3ms, Half Sine pulse	80	A

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	$V_F$	@ $I_F = 5A$ , Pulse, $T_J = 25^\circ C$	1.25	V
Reverse Current	$I_{R1}$	@ $V_R = \text{rated VR}$ $T_J = 25^\circ C$	10	$\mu A$
	$I_{R2}$	@ $V_R = \text{rated VR}$ $T_J = 125^\circ C$	500	$\mu A$
Reverse Recovery Time	$t_{rr}$	$I_F = 500mA$ , $I_R = 1A$ , and $I_{rm} = 250mA$	50	ns

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

**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	$T_J$	-	-55 to +150	$^\circ C$
Storage Temperature	$T_{stg}$	-	-55 to +150	$^\circ C$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	-	3.5	$^\circ C / W$
Approximate Weight	wt	-	1.02	g
Case Style	DO-201AD			

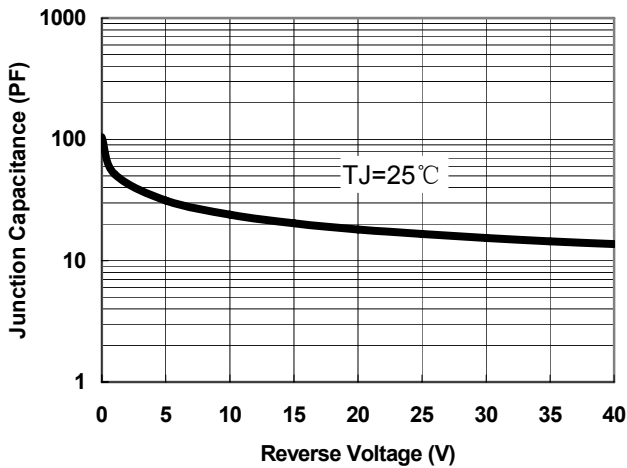


Fig.1-Typical Junction Capacitance

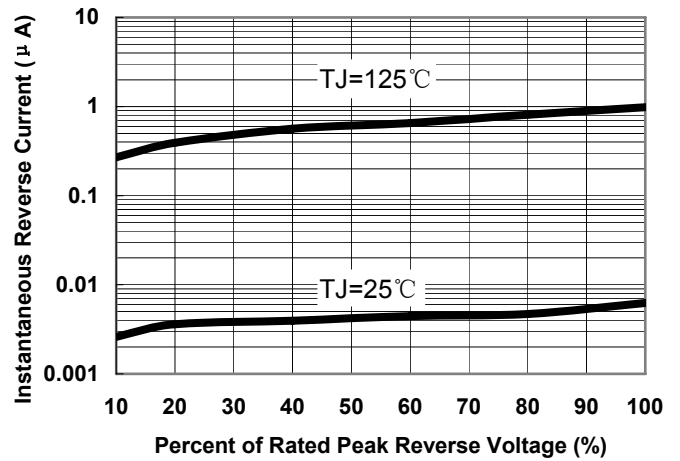


Fig.2-Typical Reverse Characteristics

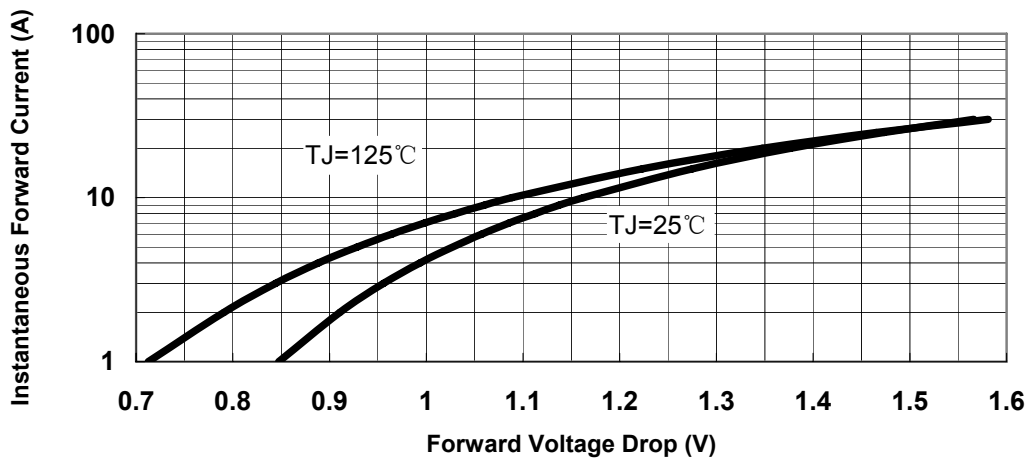


Fig.3-Typical Instantaneous Forward Voltage Characteristics

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