**Technical Data**
**Data Sheet N0271, Rev. -**

***Green Products***

# MUR560AX ULTRAFAST PLASTIC RECTIFIER

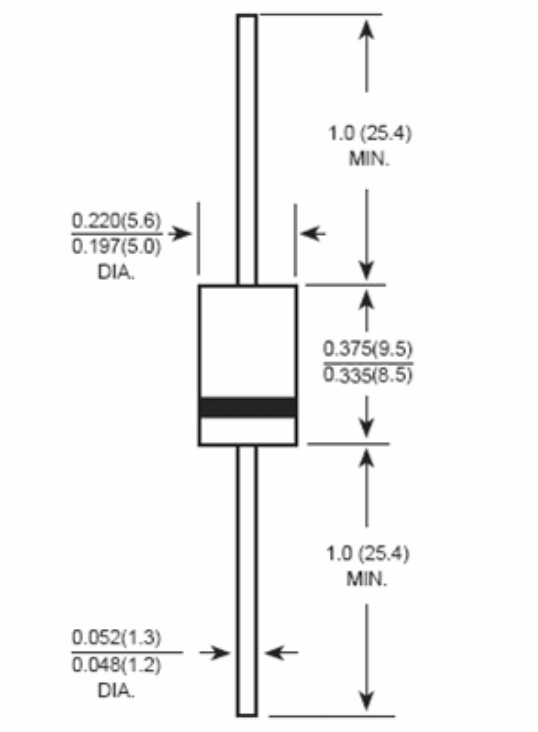
## Applications:

- **Switching Power Supply**
- **Power Switching Circuits**
- **General Purpose**

## Features:

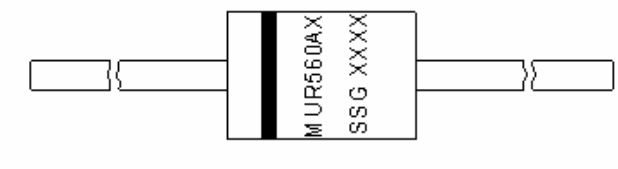
- **Glass Passivated Die Construction**
- **Ideally Suited for Automatic Assembly**
- **Low Forward Voltage Drop, High Efficiency**
- **Low Power Loss**
- **Super Fast Recovery Time**
- **Plastic Case Material has UL Flammability Classification Rating 94V-O**
- **This is a Pb − Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

## Mechanical Dimensions: In Inches / mm




**DO-201AD**

## Marking Diagram:




Where XXXXX is YYWWL

| | |
|---|---|
| MUR | = Device Type |
| 5 | = Forward Current (5A) |
| 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 |
|---|---|---|
| MUR560AX | DO-201AD<br>(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 and Electrical Characteristics @$T_A$=25°C unless otherwise specified

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

| Characteristic | Symbol | MUR560AX | Unit |
|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 600 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 420 | V |
| Average Rectified Output Current<br>(Note 1) @$T_A$ = 55°C | Io | 5.0 | A |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | $I_{FSM}$ | 150 | A |
| Forward Voltage (per element) @$I_F$ = 5.0A | $V_{FM}$ | 1.7 | V |
| Peak Reverse Current @$T_A$ = 25°C<br>At Rated DC Blocking Voltage @$T_A$ = 100°C | $I_{RM}$ | 5.0<br>500 | μA |
| 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<br>(Note 3) | $R_{\theta JA}$ | 25 | K/W |
| Max. Junction Temperature | $T_J$ | -65 to +150 | °C |
| Storage Temperature Range | $T_{STG}$ | -65 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.

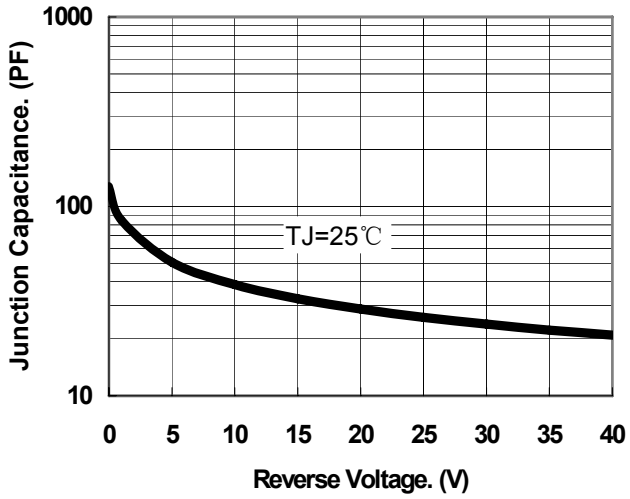



**Fig.1-Typical Junction Capacitance**

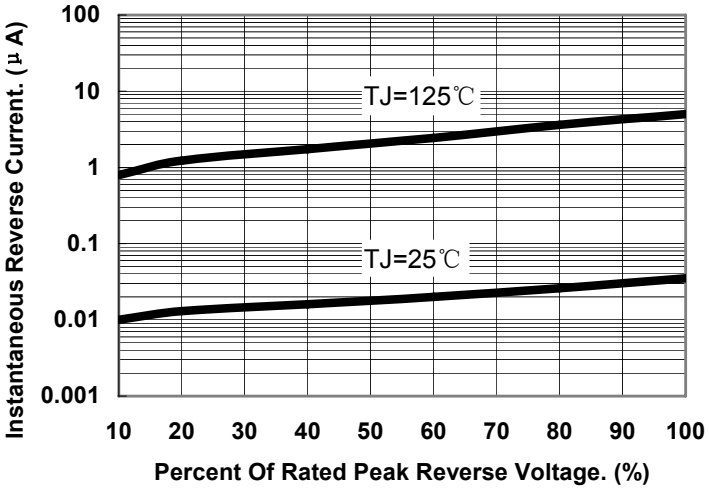



**Fig.2-Typical Reverse Characteristics**

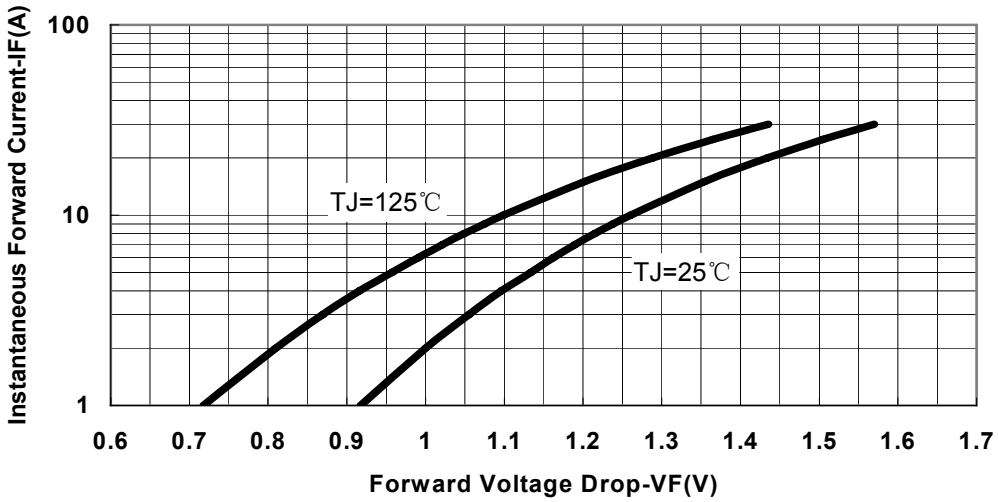



**Fig.3-Typical Instantaneous Forward Voltage Characteristics**