



# MUR405 THRU MUR4100

## Features

- High Surge Capability
- Low Leakage
- Low Forward Voltage Drop
- Ultra Fast Switching Speed For High Efficiency

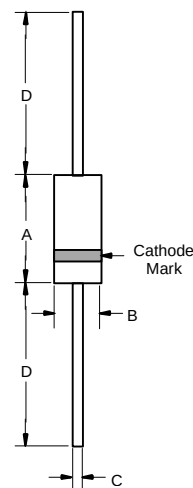
**4 Amp Super Fast  
Recovery Rectifier  
50 to 1000 Volts**

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 20°C/W

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| MUR405             | MUR405         | 50V                                    | 35V                 | 50V                         |
| MUR410             | MUR410         | 100V                                   | 70V                 | 100V                        |
| MUR415             | MUR415         | 150V                                   | 105V                | 150V                        |
| MUR420             | MUR420         | 200V                                   | 140V                | 200V                        |
| MUR440             | MUR440         | 400V                                   | 280V                | 400V                        |
| MUR460             | MUR460         | 600V                                   | 420V                | 600V                        |
| MUR480             | MUR480         | 800V                                   | 550V                | 800V                        |
| MUR4100            | MUR4100        | 1000V                                  | 700V                | 1000V                       |

## DO-201AD



## Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                                                  |             |                         |                                                       |
|----------------------------------------------------------------------------------|-------------|-------------------------|-------------------------------------------------------|
| Average Forward Current                                                          | $I_{F(AV)}$ | 4.0A                    | $T_A = 55^\circ\text{C}$                              |
| Peak Forward Surge Current                                                       | $I_{FSM}$   | 150A                    | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage<br>MUR405-415<br>MUR420-460<br>MUR480-4100 | $V_F$       | 1.00V<br>1.35V<br>1.85V | $I_{FM} = 4.0A$ ;<br>$T_A = 25^\circ\text{C}^*$       |
| Maximum DC Reverse Current At Rated DC Blocking Voltage                          | $I_R$       | 10uA<br>50uA            | $T_A = 25^\circ\text{C}$<br>$T_A = 100^\circ\text{C}$ |
| Maximum Reverse Recovery Time<br>MUR405-415<br>MUR420-460<br>MUR480-4100         | $T_{rr}$    | 45ns<br>60ns<br>75ns    | $I_F = 0.5A$ , $I_R = 1.0A$ ,<br>$I_{rr} = 0.25A$     |
| Typical Junction Capacitance MUR405-460<br>MUR480-4100                           | $C_J$       | 80pF<br>50pF            | Measured at<br>1.0MHz, $V_R = 4.0V$                   |

| DIMENSIONS |        |      |       |      |      |
|------------|--------|------|-------|------|------|
| DIM        | INCHES |      | MM    |      | NOTE |
|            | MIN    | MAX  | MIN   | MAX  |      |
| A          | ---    | .370 | ---   | 9.50 |      |
| B          | ---    | .250 | ---   | 6.40 |      |
| C          | .048   | .052 | 1.20  | 1.30 |      |
| D          | 1.000  | ---  | 25.40 | ---  |      |

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 1%