



Micro Commercial Components

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# MGR1201 THRU MGR1207

## Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

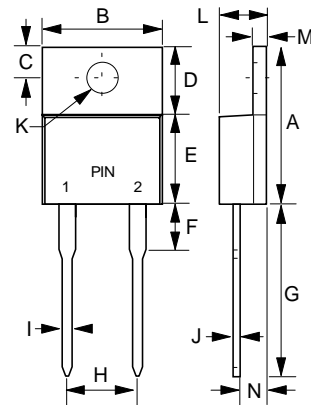
**12 Amp  
 Glass Passivated  
 Silicon Rectifiers  
 50 to 1000 Volts**

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 2.0°C/W Junction to Case

| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|--|---------------------|-----------------------------|
| MGR1201         | 50                                     | 35                  | 50                          |
| MGR1202         | 100                                    | 70                  | 100                         |
| MGR1203         | 200                                    | 140                 | 200                         |
| MGR1204         | 400                                    | 280                 | 400                         |
| MGR1205         | 600                                    | 420                 | 600                         |
| MGR1206         | 800                                    | 560                 | 800                         |
| MGR1207         | 1000                                   | 700                 | 1000                        |

## TO-220AC



## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |             |                                      |   |
|---|-------------|--------------------------------------|---|
| Maximum Average Forward Current                         | $I_{F(AV)}$ | 12 A                                 | $T_C = 100^\circ\text{C}$                             |
| Peak Forward Surge Current                              | $I_{FSM}$   | 600A                                 | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.1V                                 | $I_F=12A$<br>$T_A=25^\circ\text{C}$                   |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 5 $\mu\text{A}$<br>250 $\mu\text{A}$ | $T_A = 25^\circ\text{C}$<br>$T_A = 125^\circ\text{C}$ |
| Typical Junction Capacitance                            | $C_J$       | 100pF                                | Measured at 1.0MHz, $V_R=4.0V$                        |

| DIM | DIMENSIONS |      |       |       | NOTE |
|-----|------------|------|-------|-------|------|
|     | INCHES     |      | MM    |       |      |
| A   | .560       | .625 | 14.22 | 15.88 |      |
| B   | .380       | .420 | 9.65  | 10.67 |      |
| C   | .100       | .135 | 2.54  | 3.43  |      |
| D   | .230       | .270 | 5.84  | 6.86  |      |
| E   | .380       | .420 | 9.65  | 10.67 |      |
| F   | -----      | .250 | ----- | 6.35  |      |
| G   | .500       | .580 | 12.70 | 14.73 |      |
| H   | .190       | .210 | 4.83  | 5.33  |      |
| I   | .020       | .045 | 0.51  | 1.14  |      |
| J   | .012       | .025 | 0.30  | 0.64  |      |
| K   | .139       | .161 | 3.53  | 4.09  | ∅    |
| L   | .140       | .190 | 3.56  | 4.83  |      |
| M   | .045       | .055 | 1.14  | 1.40  |      |
| N   | .080       | .115 | 2.03  | 2.92  |      |