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MGR1201 **THRU MGR1207**

12 Amp Glass Passivated Silicon Rectifiers 50 to 1000 Volts

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low forward voltage drop
- High current capability, High reliability
- Halogen free available upon request by adding suffix "-HF"
- High surge current capability
- Case Material: Molded Plastic. UL Flammability

Classification Rating 94V-0 and MSL Rating 1

Maximum Ratings

- Mounting Torgue: 5 in-lbs Maximum Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 2.0°C/W Junction to Case

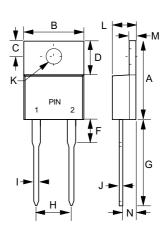
| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|---|------------------------|-----------------------------------|
| MGR1201 | 50 | 35 | 50 |
| MGR1202 | 100 | 70 | 100 |
| MGR1203 | 200 | 140 | 200 |
| MGR1204 | 400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

Electrical Characteristics @ 25° C Unless Otherwise Specified

| Maximum Average Forward Current | I _{F(AV)} | 12 A | T _C = 100°C |
|---|--------------------|--------------|--|
| Peak Forward Surge Current | I _{FSM} | 600A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V _F | 1.1V | I _F =12A T _A =25°C |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I _R | 5μΑ 250μΑ | $T_A = 25^{\circ}\mathbb{C}$ $T_A = 125^{\circ}\mathbb{C}$ |
| Typical Junction Capacitance | CJ | 100pF | Measured at 1.0MHz, V _R =4.0V |

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

TO-220AC





| DIMENSIONS | | | | | | |
|------------|--------|------|-------|-------|------|--|
| | INCHES | | ММ | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | |
| Α | .560 | .625 | 14.22 | 15.88 | | |
| В | .380 | .420 | 9.65 | 10.67 | | |
| С | .100 | .135 | 2.54 | 3.43 | | |
| D | .230 | .270 | 5.84 | 6.86 | | |
| F | | .250 | | 6.35 | | |
| G | .500 | .580 | 12.70 | 14.73 | | |
| Н | .190 | .210 | 4.83 | 5.33 | | |
| - 1 | .020 | .045 | 0.51 | 1.14 | | |
| J | .012 | .025 | 0.30 | 0.64 | | |
| K | .139 | .161 | 3.53 | 4.09 | Ø | |
| L | .140 | .190 | 3.56 | 4.83 | | |
| М | .045 | .055 | 1.14 | 1.40 | | |
| N | .080 | .115 | 2.03 | 2.92 | | |



Ordering Information

| Device | Packing |
|------------------|----------------|
| (Part Number)-BP | Bulk;1Kpcs/Box |

Note: Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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