

CMR1-02 CMR1-06
CMR1-04 CMR1-10

**SURFACE MOUNT
GENERAL PURPOSE
SILICON RECTIFIER
1 AMP, 200 THRU 1000 VOLTS**



SMB CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR1-02 Series 1.0 Amp Surface Mount Silicon Rectifier is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications. To order devices on 12mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

- Special selections available
- Low cost
- Superior lot to lot consistency
- High reliability
- "C" bend construction provides strain relief when mounted on pc board
- Glass passivated chip

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| | SYMBOL | CMR1-02 | CMR1-04 | CMR1-06 | CMR1-10 | UNITS |
|--|----------------|----------------|----------------|----------------|----------------|----------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 200 | 400 | 600 | 1000 | V |
| DC Blocking Voltage | V_R | 200 | 400 | 600 | 1000 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 140 | 280 | 420 | 700 | V |
| Average Forward Current ($T_A=75^{\circ}\text{C}$) | I_O | | | 1.0 | | A |
| Peak Forward Surge Current, $t_p=8.3\text{ms}$ | I_{FSM} | | | 30 | | A |
| Operating and Storage Junction Temperature | T_J, T_{stg} | | -65 to +175 | | | $^{\circ}\text{C}$ |
| Thermal Resistance | θ_{JL} | | 20 | | | $^{\circ}\text{C/W}$ |

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

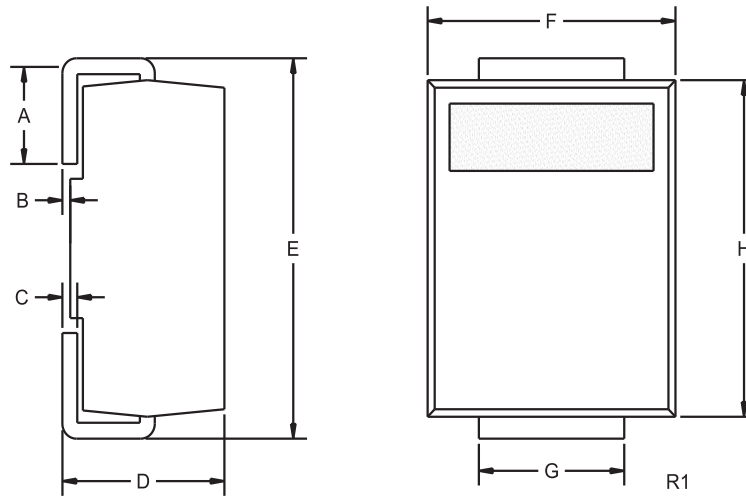
| SYMBOL | TEST CONDITIONS | MAX | UNITS |
|---------------|--|------------|---------------|
| I_R | $V_R=\text{Rated } V_{RRM}$ | 10 | μA |
| I_R | $V_R=\text{Rated } V_{RRM}, T_A=125^{\circ}\text{C}$ | 50 | μA |
| V_F | $I_F=1.0\text{A}$ | 1.1 | V |

CMR1-02 CMR1-06
CMR1-04 CMR1-10

**SURFACE MOUNT
GENERAL PURPOSE
SILICON RECTIFIER
1 AMP, 200 THRU 1000 VOLTS**



SMB CASE - MECHANICAL OUTLINE



| DEVICE | MARKING CODE |
|---------|--------------|
| CMR1-02 | C02 |
| CMR1-04 | C04 |
| CMR1-06 | C06 |
| CMR1-10 | C10 |

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|------|
| SYMBOL | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.030 | 0.060 | 0.76 | 1.52 |
| B | 0.004 | 0.008 | 0.10 | 0.20 |
| C | 0.006 | 0.012 | 0.15 | 0.30 |
| D | 0.086 | 0.096 | 2.18 | 2.44 |
| E | 0.200 | 0.220 | 5.08 | 5.59 |
| F | 0.130 | 0.150 | 3.30 | 3.81 |
| G | 0.077 | 0.083 | 1.96 | 2.11 |
| H | 0.160 | 0.180 | 4.06 | 4.57 |

SMB (REV: R1)

R5 (3-February 2010)