



CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 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 where small size is required. The SMA case occupies 30% less board space than the SMB case. To order devices on 12mm Tape and Reel (5000/13" Reel), add TR13 suffix to part number.

MARKING CODE:

CMR1-005M: C005M

CMR1-01M: C01M

FEATURES:

- SUPER MINIATURE CASE
- LOW COST
- HIGH RELIABILITY
- GLASS PASSIVATED CHIP
- SPECIAL SELECTIONS AVAILABLE
- SUPERIOR LOT TO LOT CONSISTENCY
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD

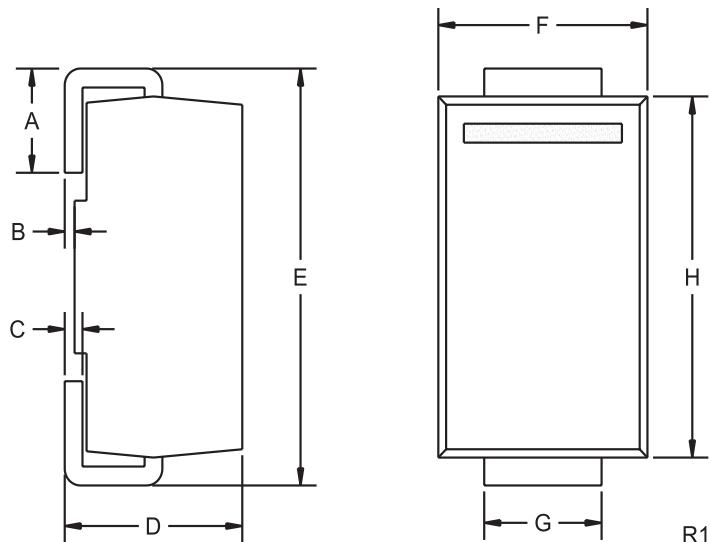
MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

| | SYMBOL | CMR1-005M | CMR1-01M | UNITS |
|-------------------------------------------------|-----------------------------------|------------------|-----------------|--------------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 50 | 100 | V |
| DC Blocking Voltage | V _R | 50 | 100 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | V |
| Average Forward Current (T _L =100°C) | I _O | 1.0 | | A |
| Peak Forward Surge Current (8.3ms) | I _{FSM} | 30 | | A |
| Operating and Storage | | | | |
| Junction Temperature | T _J , T _{stg} | -65 to +150 | | °C |
| Thermal Resistance | Θ _{JL} | 30 | | °C/W |

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|----------------|----------------------------------------------------------------|------------|------------|------------|--------------|
| V _F | I _F =1.0A | | | 1.1 | V |
| I _R | V _R =Rated V _{RRM} | | | 5.0 | µA |
| I _R | V _R =Rated V _{RRM} , T _A =125°C | | | 50 | µA |
| C _J | V _R =4.0V, f=1.0MHz | | 8.0 | | pF |

SMA CASE - MECHANICAL OUTLINE



MARKING CODE:
CMR1-005M: C005M
CMR1-01M: C01M

| 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 | 0.078 | 0.103 | 1.98 | 2.62 |
| E | 0.188 | 0.220 | 4.78 | 5.59 |
| F | 0.090 | 0.115 | 2.29 | 2.92 |
| G | 0.050 | 0.070 | 1.27 | 1.78 |
| H | 0.157 | 0.181 | 3.99 | 4.60 |

SMA (REV: R1)

R1 (18-May 2001)