

CMR1-005M  
CMR1-01M

SURFACE MOUNT  
GENERAL PURPOSE  
SILICON RECTIFIER  
1.0 AMP, 50 AND 100 VOLTS

**SUPER**mini™



**SMA CASE**

**Central**™  
**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:** ( $T_A=25^{\circ}\text{C}$  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 ( $T_L=100^{\circ}\text{C}$ )	$I_O$	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		$^{\circ}\text{C}$
Thermal Resistance	$\Theta_{JL}$	30		$^{\circ}\text{C/W}$

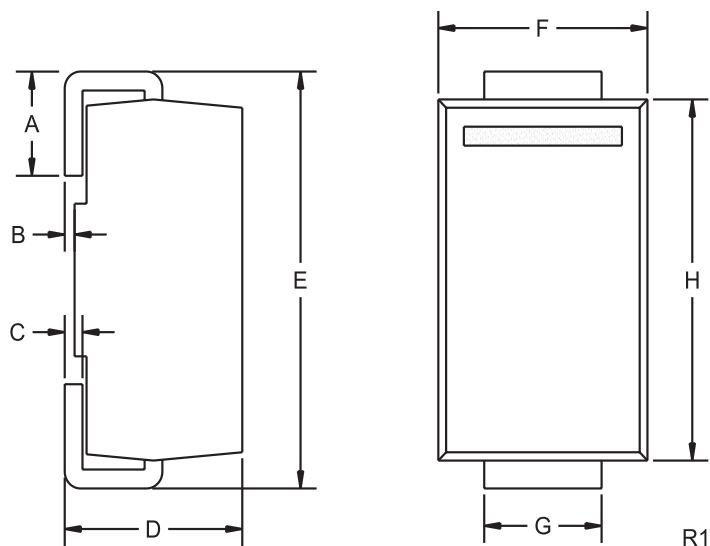
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$V_F$	$I_F=1.0\text{A}$			1.1	V
$I_R$	$V_R=\text{Rated } V_{RRM}$			5.0	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=125^{\circ}\text{C}$			50	$\mu\text{A}$
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		8.0		pF

R1 ( 18-May 2001)

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**SMA CASE - MECHANICAL OUTLINE**



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**CMR1-005M: C005M**  
**CMR1-01M: C01M**

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	0.078	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)