

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

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



**SMA CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMR1-02M 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 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: 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	CMR1-02M	CMR1-04M	CMR1-06M	CMR1-10M	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 ( $T_L=100^\circ\text{C}$ )	$I_O$			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 +150			$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$		30			$^\circ\text{C/W}$

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

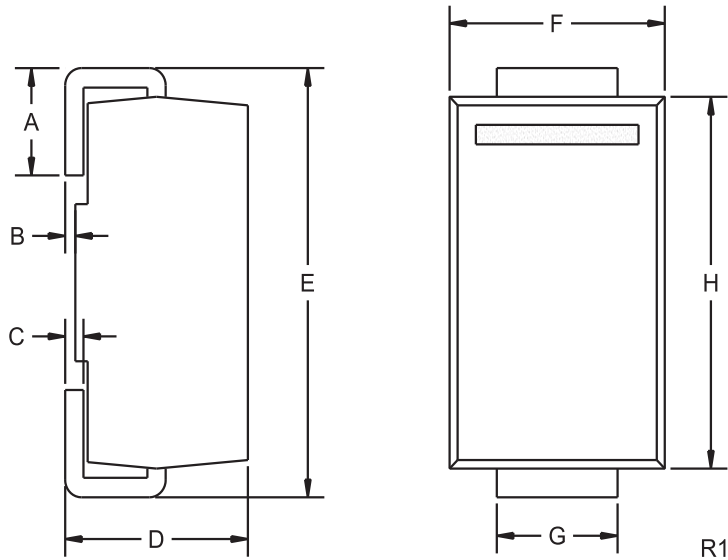
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R$ =Rated $V_{RRM}$		5.0	$\mu\text{A}$
$I_R$	$V_R$ =Rated $V_{RRM}$ , $T_A=125^\circ\text{C}$		50	$\mu\text{A}$
$V_F$	$I_F=1.0\text{A}$		1.1	V
$C_J$	$V_R=4.0\text{V}$ , $f=1.0\text{MHz}$	8.0		pF

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**SMA CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMR1-02M	C02M
CMR1-04M	C04M
CMR1-06M	C06M
CMR1-10M	C10M

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)

R3 (3-February 2010)