

CMR1-005M  
CMR1-01M

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



**SMA CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMR1-005M 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 CODES: CMR1-005M: C005M  
CMR1-01M: C01M**

**FEATURES:**

- 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)

	<b>SYMBOL</b>	<b>CMR1-005M</b>	<b>CMR1-01M</b>	<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	V
DC Blocking Voltage	$V_R$	50	100	V
RMS Reverse Voltage	$V_R(\text{RMS})$	35	70	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)

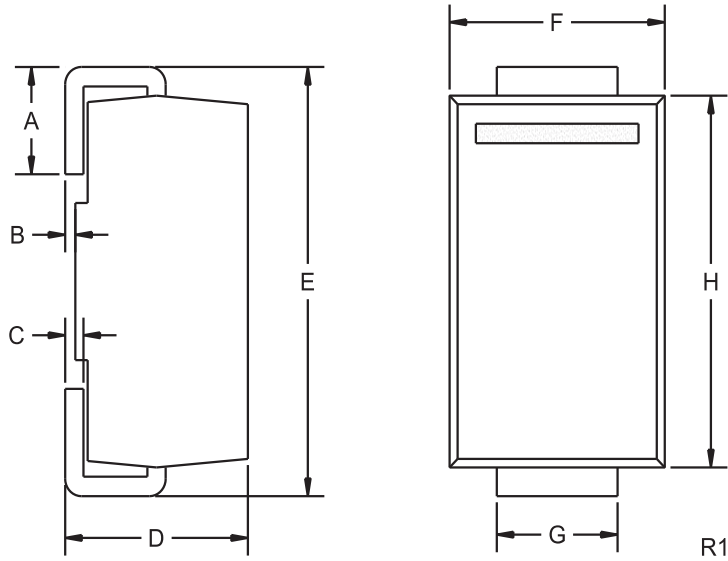
<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=\text{Rated } V_{RRM}$		5.0	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$		50	$\mu\text{A}$
$V_F$	$I_F=1.0\text{A}$		1.1	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	8.0		pF

CMR1-005M  
 CMR1-01M

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



SMA CASE - MECHANICAL OUTLINE



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

SYMBOL	DIMENSIONS			
	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)

R2 (3-February 2010)