

CMR2S-02  
 CMR2S-04  
 CMR2S-06

**SURFACE MOUNT  
 SUPER FAST RECOVERY  
 SILICON RECTIFIER  
 2 AMP, 200 THRU 600 VOLTS**



**SMB CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMR2S-02 series 2.0 amp surface mount silicon super fast recovery 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 CODES: CMR2S-02: CSF22  
 CMR2S-04: CSF24  
 CMR2S-06: CSF26**

**FEATURES:**

- Super fast switching speed (30ns MAX)
- High reverse voltage
- Glass passivated chip
- "C" bend construction provides strain relief when mounted on pc board

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

	SYMBOL	CMR2S-02	CMR2S-04	CMR2S-06	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	V
DC Blocking Voltage	$V_R$	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	V
Average Forward Current ( $T_L=110^\circ\text{C}$ )	$I_O$		2.0		A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$		50		A
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$		20		$^\circ\text{C/W}$

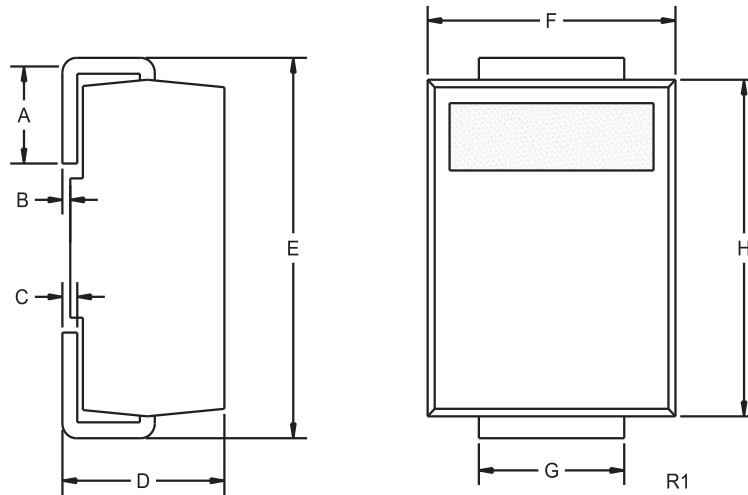
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$		1.0	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$		150	$\mu\text{A}$
$V_F$	$I_F=2.0\text{A (CMR2S-02)}$		0.95	V
$V_F$	$I_F=2.0\text{A (CMR2S-04)}$		1.25	V
$V_F$	$I_F=2.0\text{A (CMR2S-06)}$		1.70	V
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$		30	ns
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	25		pF

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**SMB CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMR2S-02	CSF22
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CMR2S-06	CSF26

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	0.086	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)

R1 (18-November 2011)