

CMR2S-02  
 CMR2S-04  
 CMR2S-06

**SURFACE MOUNT SILICON  
 SUPER FAST  
 RECOVERY RECTIFIERS  
 2.0 AMP, 200 THRU 600 VOLT**



**SMB CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMR2S-02, CMR2S-04, and CMR2S-06 are 2.0 Amp surface mount, super fast recovery silicon rectifiers 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		$^\circ\text{C/W}$

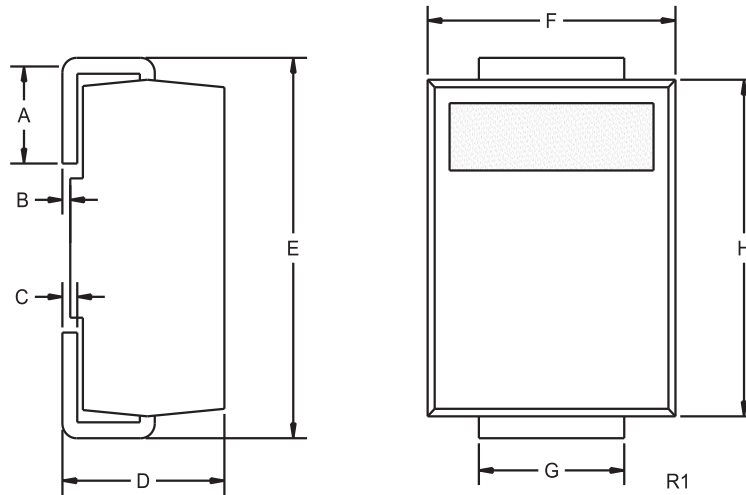
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R$ =Rated $V_{RRM}$		1.0	$\mu\text{A}$
$I_R$	$V_R$ =Rated $V_{RRM}$ , $T_A=100^\circ\text{C}$		150	$\mu\text{A}$
$V_F$	$I_F=2.0\text{A}$ (CMR2S-02)	0.88	0.95	V
$V_F$	$I_F=2.0\text{A}$ (CMR2S-04)	1.10	1.25	V
$V_F$	$I_F=2.0\text{A}$ (CMR2S-06)	1.50	1.70	V
$t_{rr}$	$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{rr}=0.25\text{A}$	23	30	ns
$C_J$	$V_R=4.0\text{V}$ , $f=1.0\text{MHz}$ (CMR2S-02)	25		pF
$C_J$	$V_R=4.0\text{V}$ , $f=1.0\text{MHz}$ (CMR2S-04)	17		pF
$C_J$	$V_R=4.0\text{V}$ , $f=1.0\text{MHz}$ (CMR2S-06)	13		pF

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**SMB CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMR2S-02	CSF22
CMR2S-04	CSF24
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)

R3 (13-March 2013)