

CMR2U-01    CMR2U-06  
 CMR2U-02    CMR2U-08  
 CMR2U-04    CMR2U-10

**SURFACE MOUNT ULTRA FAST  
 RECOVERY SILICON RECTIFIER  
 2 AMP, 100 THRU 1000 VOLTS**



**SMB CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMR2U-01 Series 2.0 Amp Surface Mount Silicon Ultra 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 CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE**

**FEATURES:**

- Low cost
- Special selections available
- High reliability
- Superior lot to lot consistency
- Glass passivated chip
- "C" bend construction provides strain relief when mounted on pc board

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C unless otherwise noted)

		CMR2U <u>-01</u>	CMR2U <u>-02</u>	CMR2U <u>-04</u>	CMR2U <u>-06</u>	CMR2U <u>-08</u>	CMR2U <u>-10</u>	UNITS
Peak Repetitive Reverse Voltage	V <sub>R</sub> RRM	100	200	400	600	800	1000	V
DC Blocking Voltage	V <sub>R</sub>	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R</sub> (RMS)	70	140	280	420	560	700	V
Average Forward Current (T <sub>L</sub> =90°C)	I <sub>O</sub>			2.0				A
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>			50				A
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>			-65 to +150				°C
Thermal Resistance	θ <sub>JL</sub>			20				°C/W

**ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>R</sub> RRM		10	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>R</sub> RRM, T <sub>A</sub> =100°C		200	μA
V <sub>F</sub>	I <sub>F</sub> =2.0A, (CMR2U-01, -02)		1.0	V
V <sub>F</sub>	I <sub>F</sub> =2.0A, (CMR2U-04)		1.4	V
V <sub>F</sub>	I <sub>F</sub> =2.0A, (CMR2U-06, -08, -10)		1.7	V
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMR2U-01, -02, -04)		50	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A 0.25A (CMR2U-06, -08, -10)		100	ns
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz	28		pF

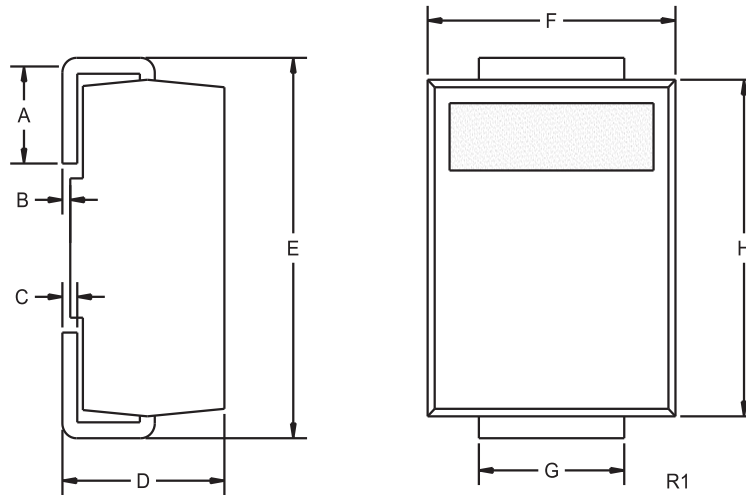
R4 (21-October 2010)

CMR2U-01    CMR2U-06  
 CMR2U-02    CMR2U-08  
 CMR2U-04    CMR2U-10



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**SMB CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMR2U-01	CU201
CMR2U-02	CU202
CMR2U-04	CU204
CMR2U-06	CU206
CMR2U-08	CU208
CMR2U-10	CU210

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)

R4 (21-October 2010)

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