

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

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: ($T_A=25^\circ\text{C}$ 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_{RRM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Forward Current ($T_L=90^\circ\text{C}$)	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	Θ_{JL}			20				$^\circ\text{C/W}$

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

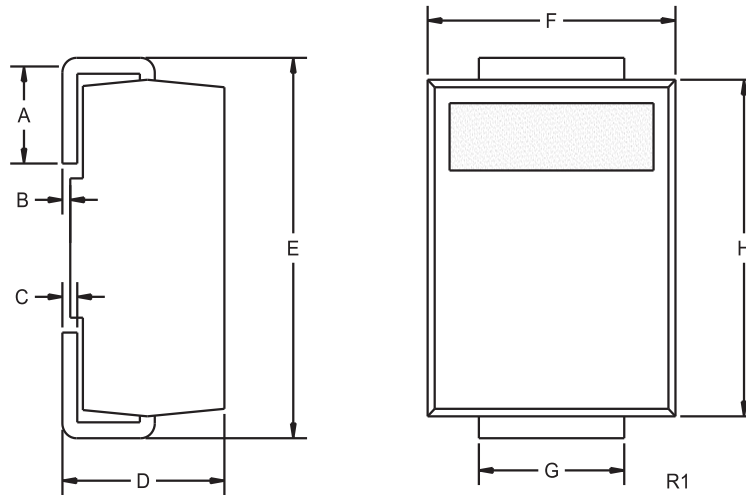
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	V_R =Rated V_{RRM}		10	μA
I_R	V_R =Rated V_{RRM} , $T_A=100^\circ\text{C}$		200	μA
V_F	$I_F=2.0\text{A}$, (CMR2U-01, -02)		1.0	V
V_F	$I_F=2.0\text{A}$, (CMR2U-04)		1.4	V
V_F	$I_F=2.0\text{A}$, (CMR2U-06, -08, -10)		1.7	V
t_{rr}	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$ (CMR2U-01, -02, -04)		50	ns
t_{rr}	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$ 0.25A (CMR2U-06, -08, -10)		100	ns
C_J	$V_R=4.0\text{V}$, $f=1.0\text{MHz}$	28		pF

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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)