

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

**SURFACE MOUNT ULTRA FAST
 RECOVERY SILICON RECTIFIER
 2.0 AMP, 100 THRU 800 VOLTS**

CentralTM
Semiconductor Corp.

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



SMB CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 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 CODES: SEE MARKING CODE TABLE ON FOLLOWING PAGE

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

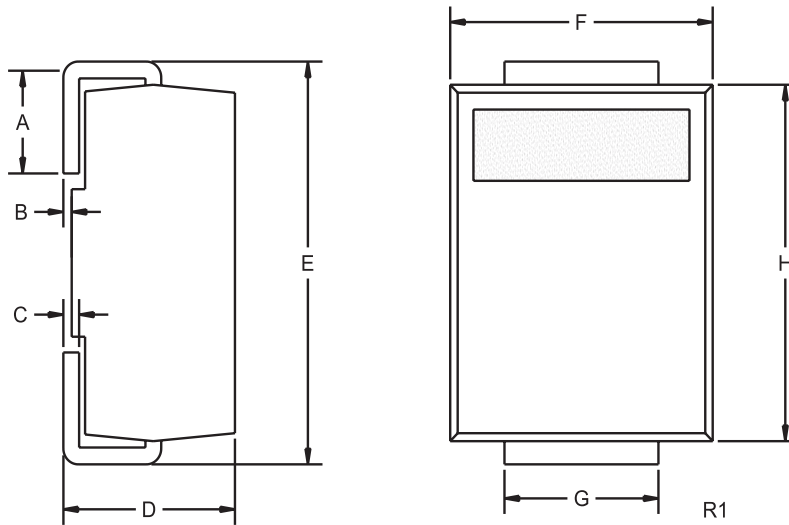
	SYMBOL	CMR2U-01	CMR2U-02	CMR2U-04	CMR2U-06	CMR2U-08	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	V
DC Blocking Voltage	V_R	100	200	400	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	V
Average Forward Current ($T_A=50^\circ\text{C}$)	I_O			2.0			A
Peak Forward Surge Current (8.3ms)	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} , $T_A=100^\circ\text{C}$		50	μA
V_F	$I_F=2.0\text{A}$, (CMR2U-01, CMR2U-02)		1.00	V
V_F	$I_F=2.0\text{A}$, (CMR2U-04)		1.25	V
V_F	$I_F=2.0\text{A}$, (CMR2U-06)		1.40	V
V_F	$I_F=2.0\text{A}$, (CMR2U-08)		1.70	V
t_{rr}	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, Recover to 0.25A (CMR2U-01 thru CMR2U-04)		50	ns
t_{rr}	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, Recover to 0.25A (CMR2U-06, CMR2U-08)		100	ns
C_J	$V_R=4.0\text{V}$, $f=1.0\text{MHz}$	50		pF

R2 (29-March 2004)

SMB CASE - MECHANICAL OUTLINE



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

SYMBOL	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)