

CMR5U-02 CMR5U-06
 CMR5U-04 CMR5U-08

**SURFACE MOUNT
 ULTRA FAST RECOVERY
 SILICON RECTIFIER
 5 AMP, 200 THRU 800 VOLTS**



SMC CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR5U-02 Series 5.0 Amp Surface Mount Silicon 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 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

- Low cost
- High current density: 65% Increase compared to CMR3U Series
- High peak forward surge current (I_{FSM})
- Low forward voltage drop (V_F)
- Glass passivated chip
- "C" bend construction provides strain relief when mounted on pc board

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

	SYMBOL	CMR5U-02	CMR5U-04	CMR5U-06	CMR5U-08	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	200	400	600	800	V
DC Blocking Voltage	V _R	200	400	600	800	V
RMS Reverse Voltage	V _{R(RMS)}	140	280	420	560	V
Average Forward Current (T _A =55°C)	I _O			5.0		A
Peak Forward Surge Current, tp=8.3ms	I _{FSM}			175		A
Operating and Storage Junction Temperature	T _J , T _{stg}			-65 to +150		°C
Thermal Resistance	θ _{JL}			10		°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C) unless otherwise noted)

SYMBOL	TEST CONDITIONS	MAX	UNITS
I _R	V _R =Rated V _{RRM}	10	µA
I _R	V _R =Rated V _{RRM} , T _A =100°C	100	µA
V _F	I _F =5.0A, (CMR5U-02)	1.0	V
V _F	I _F =5.0A, (CMR5U-04)	1.3	V
V _F	I _F =5.0A, (CMR5U-06, -08)	1.7	V
t _{rr}	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A (CMR5U-02, -04)	50	ns
t _{rr}	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A (CMR5U-06, -08)	100	ns

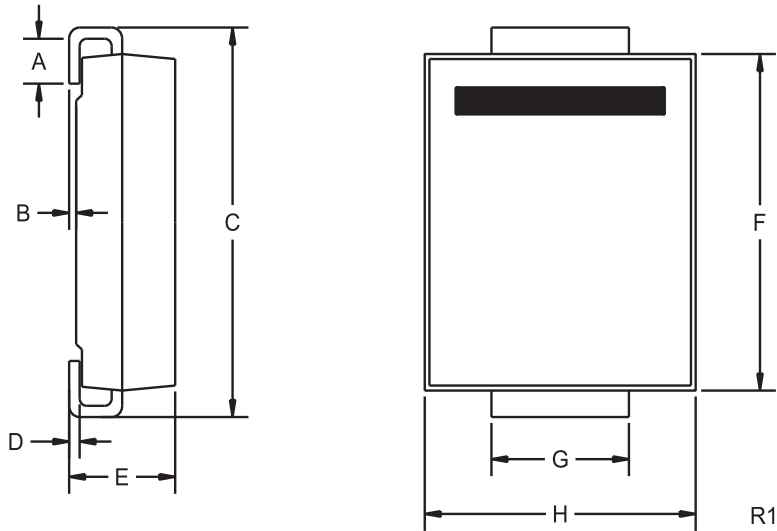
R2 (8-February 2010)

CMR5U-02 CMR5U-06
 CMR5U-04 CMR5U-08



**SURFACE MOUNT
 ULTRA FAST RECOVERY
 SILICON RECTIFIER
 5 AMP, 200 THRU 800 VOLTS**

SMC CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMR5U-02	CU502
CMR5U-04	CU504
CMR5U-06	CU506
CMR5U-08	CU508

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	0.305	0.320	7.75	8.13
D	0.006	0.012	0.15	0.31
E	0.079	0.103	2.00	2.62
F	0.260	0.280	6.60	7.11
G	0.108	0.124	2.75	3.15
H	0.220	0.245	5.59	6.22

SMC (REV: R1)

R2 (8-February 2010)