

CMR3U-01 CMR3U-06
 CMR3U-02 CMR3U-10
 CMR3U-04

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



SMC CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR3U-01 Series 3.0 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 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 reliability
- Glass passivated chip
- Special selections available
- Superior lot to lot consistency
- "C" bend construction provides strain relief, When mounted on pc board

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

	SYMBOL	CMR3U -01	CMR3U -02	CMR3U -04	CMR3U -06	CMR3U -10	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	1000	V
DC Blocking Voltage	V_R	100	200	400	600	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	700	V
Average Forward Current ($T_A=75^\circ\text{C}$)	I_O			3.0			A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}			150			A
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +175			$^\circ\text{C}$
Thermal Resistance	θ_{JL}			10			$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$	5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$	500	μA
V_F	$I_F=3.0\text{A}$ (CMR3U-01, -02)	1.00	V
V_F	$I_F=3.0\text{A}$ (CMR3U-04)	1.25	V
V_F	$I_F=3.0\text{A}$ (CMR3U-06)	1.40	V
V_F	$I_F=3.0\text{A}$ (CMR3U-10)	1.70	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMR3U-01, -02, -04)	50	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMR3U-06, -10)	100	ns

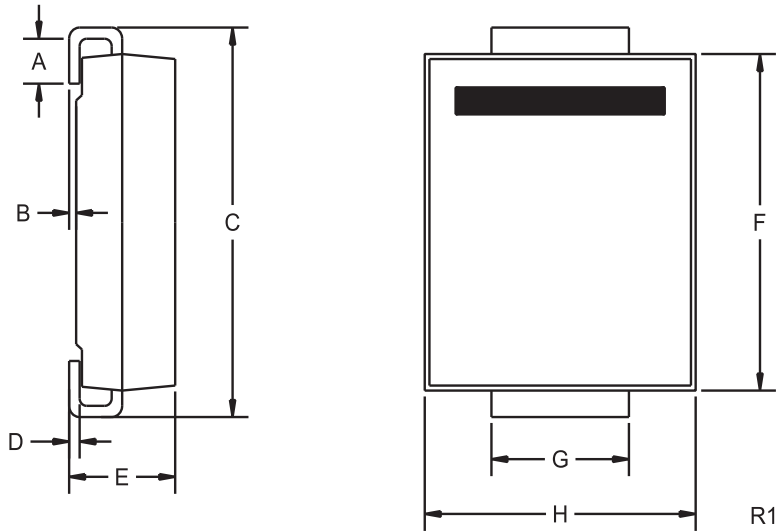
R3 (3-February 2010)

CMR3U-01 CMR3U-06
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 CMR3U-04



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SMC CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMR3U-01	CU301
CMR3U-02	CU302
CMR3U-04	CU304
CMR3U-06	CU306
CMR3U-10	CU310

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)

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