

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](http://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<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL	CMR3U -01	CMR3U -02	CMR3U -04	CMR3U -06	CMR3U -10	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	1000	V
DC Blocking Voltage	V <sub>R</sub>	100	200	400	600	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	140	280	420	700	V
Average Forward Current (T <sub>A</sub> =75°C)	I <sub>O</sub>			3.0			A
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>			150			A
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>			-65 to +175			°C
Thermal Resistance	θ <sub>JL</sub>			10			°C/W

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

SYMBOL	TEST CONDITIONS	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>	5.0	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =100°C	500	μA
V <sub>F</sub>	I <sub>F</sub> =3.0A (CMR3U-01, -02)	1.00	V
V <sub>F</sub>	I <sub>F</sub> =3.0A (CMR3U-04)	1.25	V
V <sub>F</sub>	I <sub>F</sub> =3.0A (CMR3U-06)	1.40	V
V <sub>F</sub>	I <sub>F</sub> =3.0A (CMR3U-10)	1.70	V
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMR3U-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 (CMR3U-06, -10)	100	ns

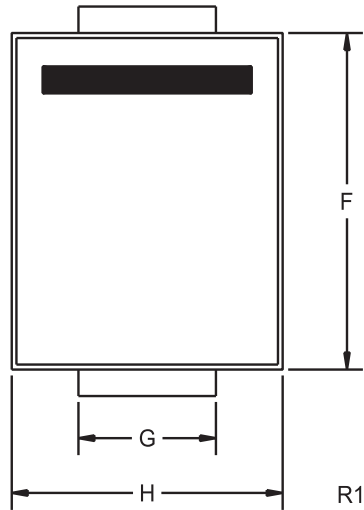
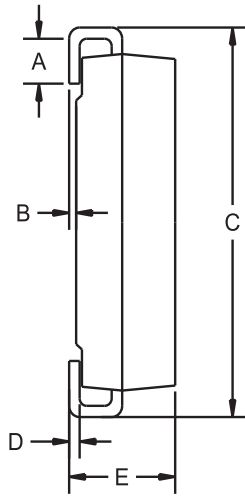
R3 (3-February 2010)

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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)

R3 (3-February 2010)