

CMR1U-01      CMR1U-06  
 CMR1U-02      CMR1U-10  
 CMR1U-04

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



**SMB CASE**

# Central™

**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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 1.0 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 THE FOLLOWING PAGE**

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

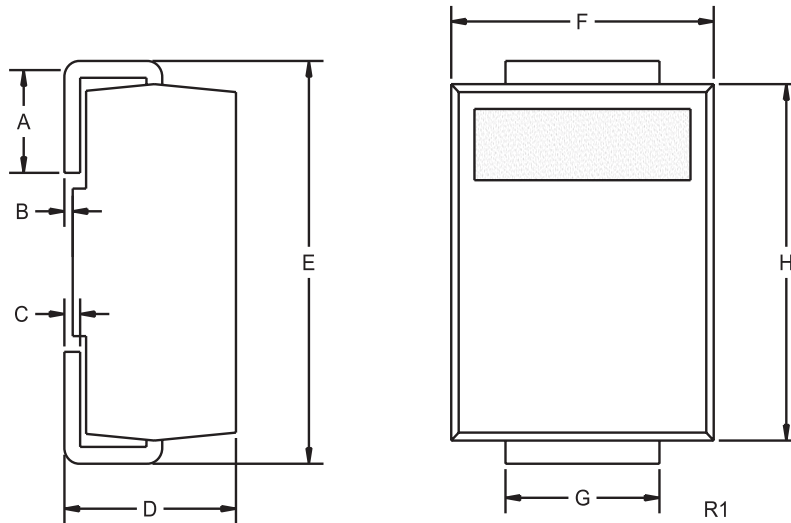
	SYMBOL	CMR1U <u>-01</u>	CMR1U <u>-02</u>	CMR1U <u>-04</u>	CMR1U <u>-06</u>	CMR1U <u>-10</u>	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	1000	V
DC Blocking Voltage	V <sub>R</sub>	100	200	400	600	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	140	280	420	700	V
Average Forward Current (T <sub>A</sub> =75°C)	I <sub>O</sub>			1.0			A
Peak Forward Surge Current(8.3ms)	I <sub>FSM</sub>			30			A
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65 to +175				°C
Thermal Resistance	θ <sub>JL</sub>			20			°C/W

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

SYMBOL	TEST CONDITIONS	MIN	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> =125°C		100	μA
V <sub>F</sub>	I <sub>F</sub> =1.0A, (CMR1U-01, CMR1U-02)		1.0	V
V <sub>F</sub>	I <sub>F</sub> =1.0A, (CMR1U-04)		1.25	V
V <sub>F</sub>	I <sub>F</sub> =1.0A, (CMR1U-06)		1.40	V
V <sub>F</sub>	I <sub>F</sub> =1.0A, (CMR1U-10)		1.70	V
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recover to 0.25A (CMR1U-01, -02, -04)		50	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recover to 0.25A (CMR1U-06, -10)		100	ns

R3 (9-November 2005)

**SMB CASE - MECHANICAL OUTLINE**



**MARKING CODES:**

DEVICE	MARKING CODE
CMR1U-01	CU01
CMR1U-02	CU02
CMR1U-04	CU04
CMR1U-06	CU06
CMR1U-10	CU10

SYMBOL	DIMENSIONS		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)

R3 (9-November 2005)