



**THE DATASHEET OF  
CMR2U-01 TR13 PBFREE**



CMR2U-01 CMR2U-06  
 CMR2U-02 CMR2U-08  
 CMR2U-04 CMR2U-10

**SURFACE MOUNT SILICON  
 ULTRA FAST RECOVERY RECTIFIERS  
 2.0 AMP, 100 THRU 1000 VOLT**



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMR2U-01 series 2.0 Amp surface mount silicon ultra fast recovery rectifier is a highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

**MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE**



**SMB CASE**

**FEATURES:**

- Special selections available
- High reliability
- Glass passivated chip
- “C” bend construction provides strain relief when mounted on pc board

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

		CMR2U-01	CMR2U-02	CMR2U-04	CMR2U-06	CMR2U-08	CMR2U-10	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	V
DC Blocking Voltage	V <sub>R</sub>	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	140	280	420	560	700	V
Average Forward Current (T <sub>L</sub> =90°C)	I <sub>O</sub>			2.0				A
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>			50				A
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>			-65 to +150				°C
Thermal Resistance	θ <sub>JL</sub>			20				°C/W

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

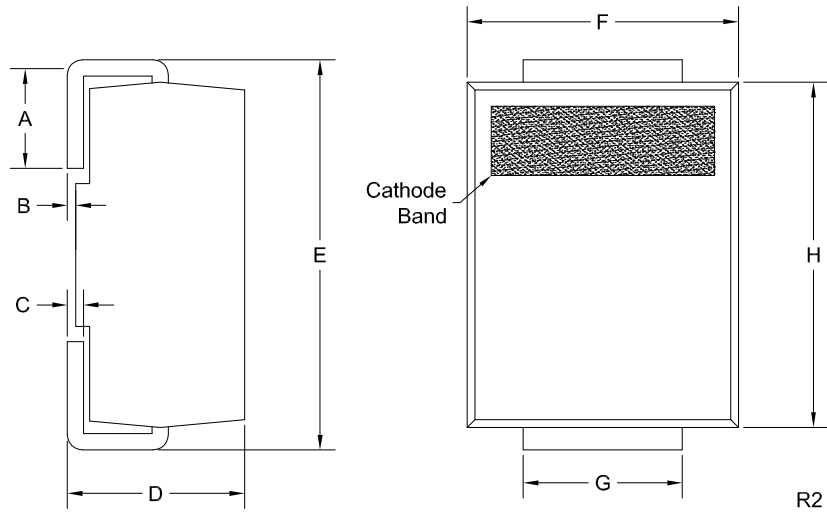
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>		10	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =100°C		200	μA
V <sub>F</sub>	I <sub>F</sub> =2.0A, (CMR2U-01, -02)		1.0	V
V <sub>F</sub>	I <sub>F</sub> =2.0A, (CMR2U-04)		1.4	V
V <sub>F</sub>	I <sub>F</sub> =2.0A, (CMR2U-06, -08, -10)		1.7	V
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMR2U-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 0.25A (CMR2U-06, -08, -10)		100	ns
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz	28		pF

CMR2U-01 CMR2U-06  
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**SMB CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMR2U-01	CU201
CMR2U-02	CU202
CMR2U-04	CU204
CMR2U-06	CU206
CMR2U-08	CU208
CMR2U-10	CU210

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.000	0.008	0.00	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	0.191	4.06	4.85

SMB (REV: R2)

R5 (4-September 2018)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management