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

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

Central
Semiconductor™

SMA CASE

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMR1U-01M series 1.0 Amp surface mount Ultra Fast Recovery silicon rectifier is a highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications where small size is required. The SMA case occupies 30% less board space than the SMB case.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

• High reliability

• Glass passivated chip

• Special selections available

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

	SYMBOL	CMR1U -01M	CMR1U -02M	CMR1U -04M	CMR1U -06M	CMR1U -10M	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°C)	I_O			1.0			A
Peak Forward Surge Current, tp=8.3ms	I_{FSM}			30			A
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +175			°C
Thermal Resistance	Θ_{JL}			30			°C/W

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	V_R=Rated V_{RRM}		5.0	µA
V_F	I_F=1.0A, (CMR1U-01M, -02M)		1.00	V
V_F	I_F=1.0A, (CMR1U-04M)		1.25	V
V_F	I_F=1.0A, (CMR1U-06M)		1.40	V
V_F	I_F=1.0A, (CMR1U-10M)		1.70	V
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-01M, -02M)		35	ns
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-04M)		50	ns
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-06M)		75	ns
t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A (CMR1U-10M)		100	ns
t_{fr}	I_F=1.0A, V_{fr}=2.0V	175	250	ns

CMR1U-01M   CMR1U-06M
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CMR1U-04M

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SMA CASE - MECHANICAL OUTLINE

Cathode Band

R3
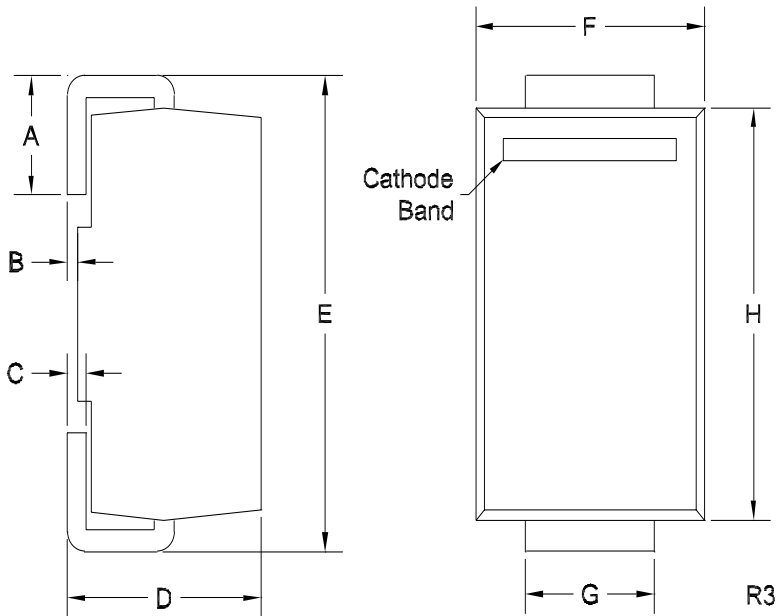
DEVICE	MARKING CODE
CMR1U-01M	CU01M
CMR1U-02M	CU02M
CMR1U-04M	CU04M
CMR1U-06M	CU06M
CMR1U-10M	CU10M

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.002	0.008	0.05	0.20
C	0.006	0.012	0.15	0.30
D	0.078	0.103	1.98	2.62
E	0.188	0.220	4.78	5.59
F	0.090	0.115	2.29	2.92
G	0.050	0.070	1.27	1.78
H	0.157	0.181	3.99	4.60

SMA (REV:R3)

R7 (02-June 2023)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

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).

CONTACT US

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