



**THE DATASHEET OF
CMR1F-02M TR13 PBFREE**



CMR1F-02M CMR1F-08M
 CMR1F-04M CMR1F-10M
 CMR1F-06M

**SURFACE MOUNT SILICON
 FAST RECOVERY RECTIFIERS
 1.0 AMP, 200 THRU 1000 VOLT**



SMA CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR1F-02M series 1.0 Amp surface mount silicon rectifier is a well constructed, 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: ($T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	-02M	-04M	-06M	-08M	-10M	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
DC Blocking Voltage	V_R	200	400	600	800	1000	V
RMS Reverse Voltage	$V_R(\text{RMS})$	140	280	420	560	700	V
Average Forward Current ($T_L=120^\circ\text{C}$)	I_O			1.0			A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}			30			A
Operating and Storage							
Junction Temperature	T_J, T_{stg}			-65 to +150			$^\circ\text{C}$
Thermal Resistance	θ_{JL}			30			$^\circ\text{C/W}$

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

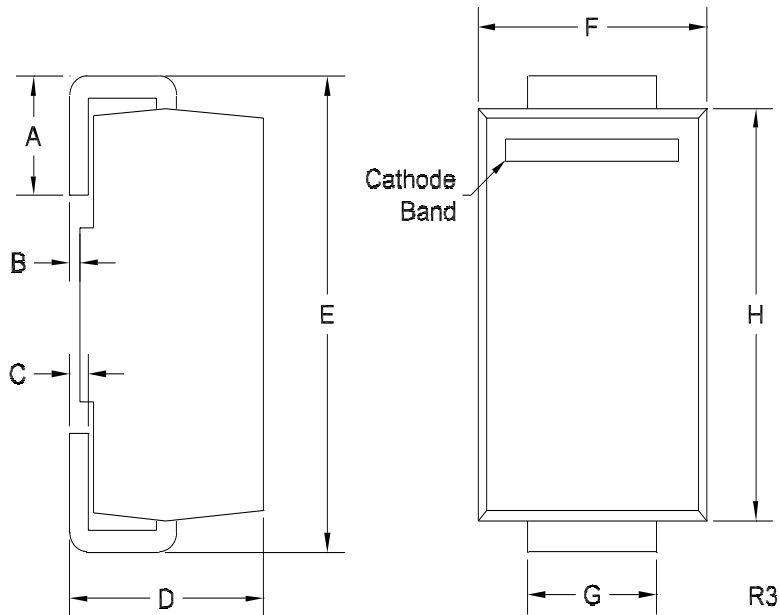
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$		5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$		200	μA
V_F	$I_F=1.0\text{A}$		1.3	V
C_J	$V_R=0, f=1.0\text{MHz}$		35	pF
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMR1F-02M, -04M)		150	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMR1F-06M)		250	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMR1F-08M, -10M)		500	ns

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SMA CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMR1F-02M	CF02M
CMR1F-04M	CF04M
CMR1F-06M	CF06M
CMR1F-08M	CF08M
CMR1F-10M	CF10M

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	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)

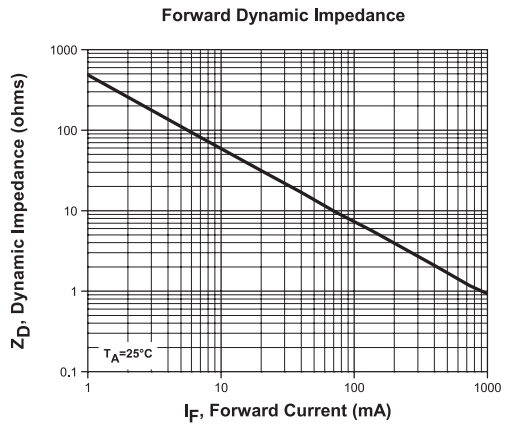
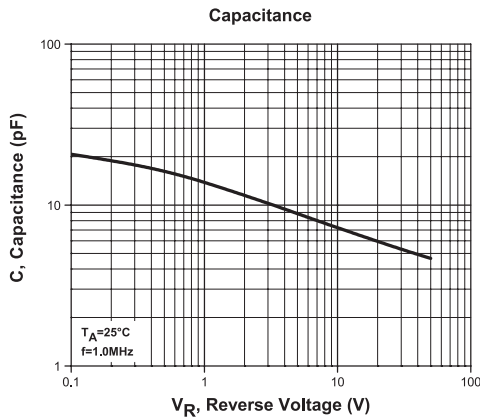
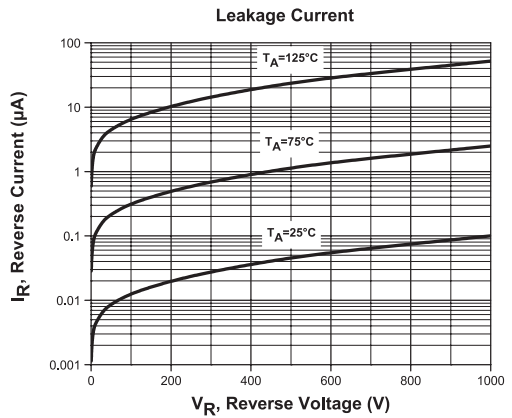
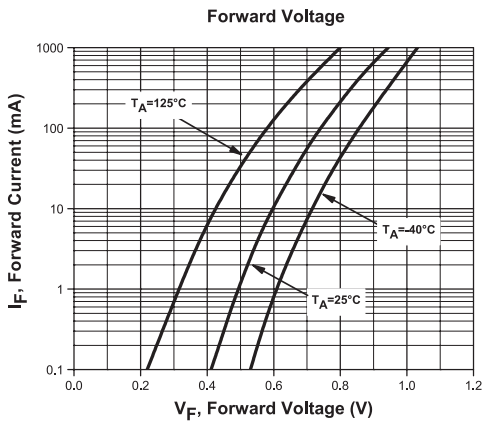
R5 (02-June 2023)

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TYPICAL ELECTRICAL CHARACTERISTICS

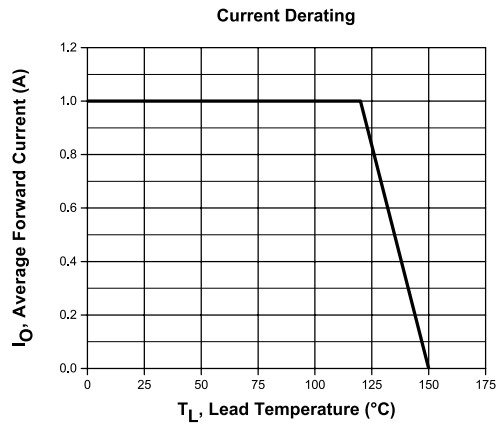
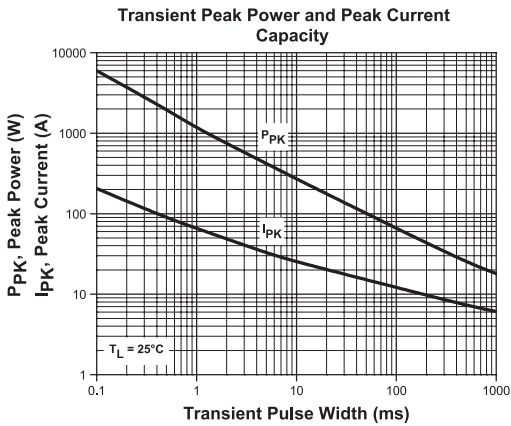


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TYPICAL ELECTRICAL CHARACTERISTICS



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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- ✓ Obsolete Management
- ✓ Cost Control Management
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- ✓ Alternative Solution
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