CMR1F-06M

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



**SMA CASE** 

# Central Semiconductor Corp.

www.centralsemi.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

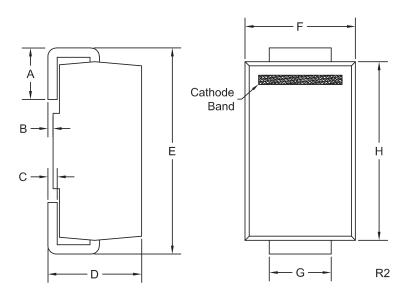
MAXIMUM RATINGS: (TA=25°C unless	s otherwise	noted)		CMR1F			
	SYMBOL	-02M	-04M	-06M	-08M	-10M	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	V
DC Blocking Voltage	$V_{R}$	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	140	280	420	560	700	V
Average Forward Current (T <sub>L</sub> =120°C)	lo			1.0			Α
Peak Forward Surge Current, tp=8.3ms	IFSM			30			Α
Operating and Storage							
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-	65 to +15	0		°C
Thermal Resistance	$\Theta_{\sf JL}$			30			°C/W

ELECTRICAL	CHARACTERISTICS: (TA=25°C unless otherwise noted	d)		
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	V <sub>R</sub> =Rated V <sub>RRM</sub>		5.0	μΑ
<sup>I</sup> R	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =125°C		200	μΑ
VF	I <sub>F</sub> =1.0A		1.3	V
CJ	V <sub>R</sub> =0, f=1.0MHz		35	pF
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMR1F-02M, -04M)		150	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMR1F-06M)		250	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (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		

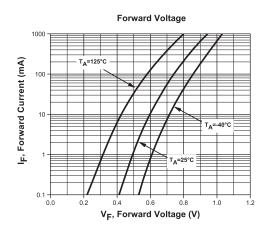
DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
Α	0.030	0.060	0.76	1.52	
В	0.004	0.008	0.10	0.20	
С	0.006	0.012	0.15	0.30	
D	0.078	0.103	1.98	2.62	
E	0.188	0.220	4.78	5.59	
F	0.090	0.115	2.29	2.92	
G	0.050	0.070	1.27	1.78	
Н	0.157	0.181	3.99	4.60	

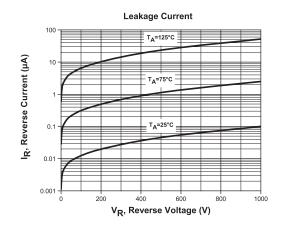
SMA (REV: R2)

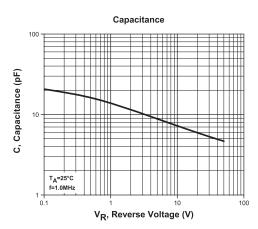
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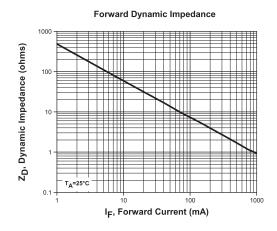


# TYPICAL ELECTRICAL CHARACTERISTICS







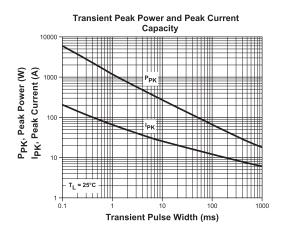


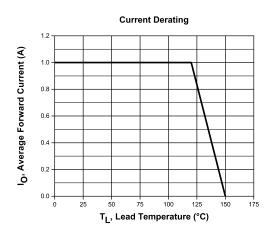
SURFACE MOUNT SILICON



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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 (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

#### **CONTACT US**

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