

SURFACE MOUNT FAST RECOVERY SILICON RECTIFIER 1 AMP, 200 THRU 800 VOLTS



• Device is *Halogen Free* by design



www.centralsemi.com

# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMMR1F series are high quality 1.0 amp surface mount silicon rectifiers, well constructed, highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

# MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

### FEATURES:

- High reverse voltage capability
- Low leakage current
- Low reverse recovery times
- Low package profile (1.08mm MAX)

MAXIMUM RATINGS: (TA=25°C unless otherw	ise noted)	CMMR1F				
	SYMBOL	<u>-02</u>	<u>-04</u>	<u>-06</u>	<u>-08</u>	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	200	400	600	800	V
DC Blocking Voltage	VR	200	400	600	800	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	140	280	420	560	V
Average Forward Current (T <sub>L</sub> =110°C)	IO		1	.0		А
Peak Forward Surge Current (8.3ms)	IFSM		3	0		А
Operating and Storage Junction Temperature	Тј, Т <sub>stg</sub>		-65 to	+150		°C
Thermal Resistance	Θ၂		3	0		°C/W

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

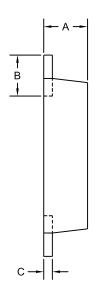
		,		
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>		1.0	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =125°C		50	μA
VF	I <sub>F</sub> =1.0A		1.3	V
Сј	V <sub>R</sub> =4.0V, f=1.0MHz	9.0		pF
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMMR1F-02, 04)		150	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMMR1F-06)		250	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A (CMMR1F-08)		500	ns

R3 (19-March 2012)



CMMR1F-02 CMMR1F-06 CMMR1F-04 CMMR1F-08

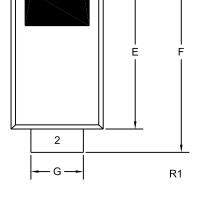
SURFACE MOUNT FAST RECOVERY SILICON RECTIFIER 1 AMP, 200 THRU 800 VOLTS



# SOD-123F CASE - MECHANICAL OUTLINE

D —

1



DEVICE	MARKING CODE
CMMR1F-02	CF02F
CMMR1F-04	CF04F
CMMR1F-06	CF06F
CMMR1F-08	CF08F

DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
А	0.035	0.043	0.88	1.08	
В	0.020	0.031	0.50	0.80	
С	0.004	0.008	0.10	0.20	
D	0.065	0.077	1.65	1.95	
E	0.104	0.116	2.65	2.95	
F	0.140	0.156	3.55	3.95	
G	0.030	0.041	0.75	1.05	
SOD-123F (REV:R1)					

LEAD CODE:

1) Cathode 2) Anode

R3 (19-March 2012)

www.centralsemi.com

# **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

#### **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

ss your design challenges.

· Custom product packing

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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

# CONTACT US

# **Corporate Headquarters & Customer Support Team**

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110 Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388 www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors: www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <u>www.centralsemi.com/terms</u>

