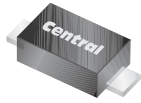


CMMR1F-02 CMMR1F-06  
CMMR1F-04 CMMR1F-08

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



**SOD-123F CASE**

• Device is **Halogen Free** by design



[www.centralemi.com](http://www.centralemi.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:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

|                                                     |                | CMMR1F |             |     |     |                    |
|-----------------------------------------------------|----------------|--------|-------------|-----|-----|--------------------|
|                                                     | SYMBOL         | -02    | -04         | -06 | -08 | UNITS              |
| Peak Repetitive Reverse Voltage                     | $V_{RRM}$      | 200    | 400         | 600 | 800 | V                  |
| DC Blocking Voltage                                 | $V_R$          | 200    | 400         | 600 | 800 | V                  |
| RMS Reverse Voltage                                 | $V_{R(RMS)}$   | 140    | 280         | 420 | 560 | V                  |
| Average Forward Current ( $T_L=110^\circ\text{C}$ ) | $I_O$          |        |             | 1.0 |     | A                  |
| Peak Forward Surge Current (8.3ms)                  | $I_{FSM}$      |        |             | 30  |     | A                  |
| Operating and Storage Junction Temperature          | $T_J, T_{stg}$ |        | -65 to +150 |     |     | $^\circ\text{C}$   |
| Thermal Resistance                                  | $\theta_{JL}$  |        | 30          |     |     | $^\circ\text{C/W}$ |

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

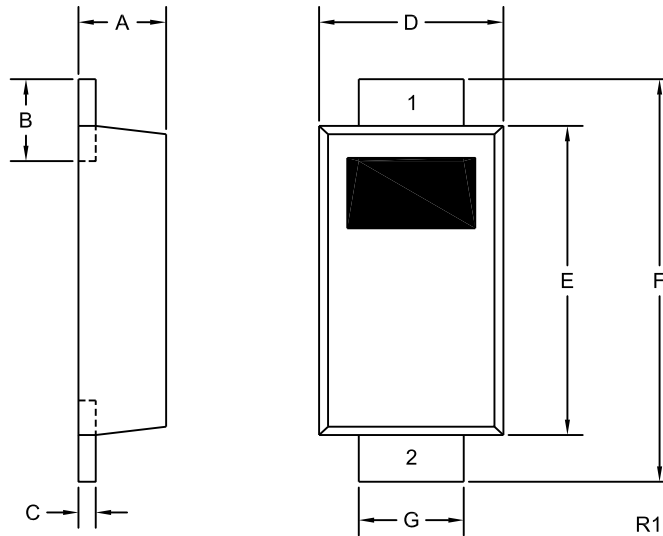
| SYMBOL   | TEST CONDITIONS                                                         | TYP | MAX | UNITS         |
|----------|-------------------------------------------------------------------------|-----|-----|---------------|
| $I_R$    | $V_R=\text{Rated } V_{RRM}$                                             |     | 1.0 | $\mu\text{A}$ |
| $I_R$    | $V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$                      |     | 50  | $\mu\text{A}$ |
| $V_F$    | $I_F=1.0\text{A}$                                                       |     | 1.3 | V             |
| $C_J$    | $V_R=4.0\text{V}, f=1.0\text{MHz}$                                      | 9.0 |     | pF            |
| $t_{rr}$ | $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMMR1F-02, 04) |     | 150 | ns            |
| $t_{rr}$ | $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMMR1F-06)     |     | 250 | ns            |
| $t_{rr}$ | $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (CMMR1F-08)     |     | 500 | ns            |

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**



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

| DIMENSIONS |        |       |             |      |
|------------|--------|-------|-------------|------|
| SYMBOL     | INCHES |       | MILLIMETERS |      |
|            | MIN    | MAX   | MIN         | MAX  |
| A          | 0.035  | 0.043 | 0.88        | 1.08 |
| B          | 0.020  | 0.031 | 0.50        | 0.80 |
| C          | 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)

## 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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