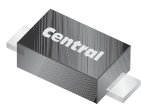


CMMR1S-02

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



SOD-123F CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMMR1S-02 is a 1.0 Amp Silicon Super Fast Recovery Rectifier in the SOD-123F surface mount package. This high quality, well constructed, highly reliable device is designed for use in all types of commercial, industrial, entertainment, computer and automotive applications.

MARKING CODE: CSF02F

FEATURES:

- Small size (58% smaller than the SMA package)
- 67% lower profile than SMA
- Greatly improved power dissipation per board area compared to the SMA
- Low Forward Voltage
- High Current
- Thermally efficient Flat Lead package design

| MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted) | SYMBOL | | UNITS |
|--|----------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 200 | V |
| DC Blocking Voltage | V_R | 200 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 140 | 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 | θ_{JA} | 180 | $^\circ\text{C/W}$ |

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

| SYMBOL | TEST CONDITIONS | TYP | MAX | UNITS |
|---------------|--|------------|------------|---------------|
| I_R | $V_R=200\text{V}$ | | 10 | μA |
| I_R | $V_R=200\text{V}, T_A=100^\circ\text{C}$ | | 50 | μA |
| V_F | $I_F=1.0\text{A}$ | | 0.95 | V |
| t_{rr} | $I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Rec. to } 0.25\text{A}$ | | 35 | ns |
| C_J | $V_R=4.0\text{V}, f=1.0\text{MHz}$ | 4.0 | | pF |

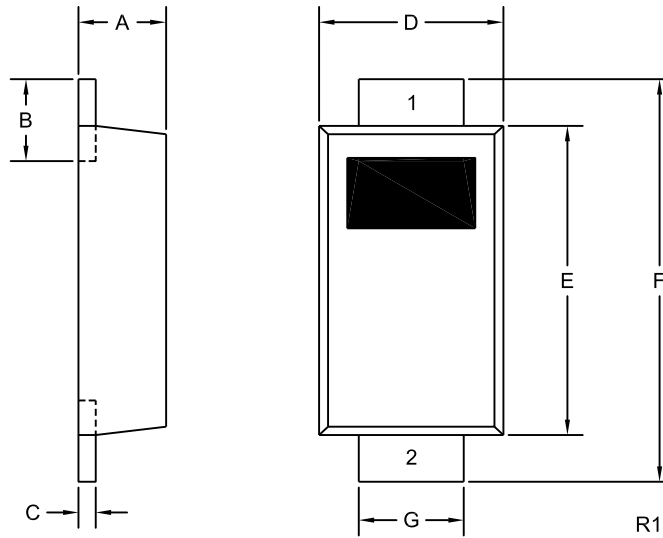
R2 (25-January 2010)

CMMR1S-02

SURFACE MOUNT
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SOD-123F CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: CSF02F

| 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)

R2 (25-January 2010)

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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