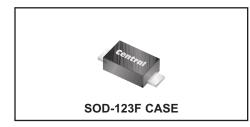


SURFACE MOUNT ULTRA FAST RECOVERY SILICON RECTIFIER 1 AMP, 200 THRU 800 VOLTS



FEATURES:

• Flat lead design and clip assembly allow for a larger die size and improved thermal efficiency



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMMR1U 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. The SOD-123F case occupies 58% less board space than the SMA, with a 67% lower profile.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

- Superior lot to lot consistency
- High reliability

Low cost

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

| | SYMBOL | CMMR1U -02 | CMMR1U -04 | CMMR1U -06 | CMMR1U -08 | UNITS |
|--|---------------------|---------------|---------------|---------------|---------------|-------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 200 | 400 | 600 | 800 | V |
| DC Blocking Voltage | VR | 200 | 400 | 600 | 800 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 140 | 280 | 420 | 560 | V |
| Average Forward Current (TL=90°C) | IO | | 1 | .0 | | А |
| Peak Forward Surge Current (8.3ms) | IFSM | | 3 | 0 | | А |
| Operating and Storage Junction Temperature | TJ, Tstg | | -65 to | +150 | | °C |
| Thermal resistance (Note 1) | Θ_{JA} | | 18 | 30 | | °C/W |
| Thermal resistance (Note 2) | Θ_{JA} | | 6 | 5 | | °C/W |
| | | | | | | |

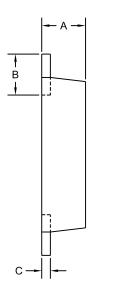
| ELECT | TRICAL CHARACTERISTICS: (T _A =25°C unless ot | herwise noted) | | |
|-----------------|---|----------------|-----|-------|
| SYMBO | OL TEST CONDITIONS | TYP | MAX | UNITS |
| IR | V _R =Rated V _{RRM} | | 1.0 | μA |
| IR | V _R =Rated V _{RRM} , T _A =125°C | | 50 | μA |
| V_{F} | I _F =1.0A (CMMR1U-02) | | 1.0 | V |
| V_{F} | I _F =1.0A (CMMR1U-04) | | 1.4 | V |
| V_{F} | I _F =1.0A (CMMR1U-06, -08) | | 1.7 | V |
| СЈ | V _R =4.0V, f=1.0MHz | 9.0 | | pF |
| t _{rr} | I _F =0.5A, I _R =1.0A, I _{rr} =0.25A (CMMR1U-02 | 2, -04) | 50 | ns |
| t _{rr} | I _F =0.5A, I _R =1.0A, I _{rr} =0.25A (CMMR1U-06 | 6, -08) | 100 | ns |
| Notes: (| (1) FR-4 Epoxy PCB with copper mounting pad area of 2.2mm ² | | | |

(2) FR-4 Epoxy PCB with copper mounting pad area of 2.2mm² (2) FR-4 Epoxy PCB with copper mounting pad area of 36mm²

R3 (20-December 2010)



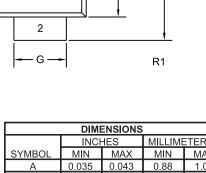
SURFACE MOUNT ULTRA FAST RECOVERY SILICON RECTIFIER 1 AMP, 200 THRU 800 VOLTS



SOD-123F CASE - MECHANICAL OUTLINE

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| DEVICE | MARKING CODE | |
|-----------|--------------|--|
| CMMR1U-02 | CU02F | |
| CMMR1U-04 | CU04F | |
| CMMR1U-06 | CU06F | |
| CMMR1U-08 | CU08F | |

| 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) | | | | | | |

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R3 (20-December 2010

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LEAD CODE: 1) Cathode 2) Anode

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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

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

· Custom product packing

- 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

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