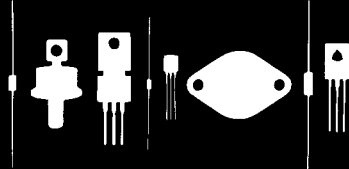


Central  
Semiconductor Corp.

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**Central™  
Semiconductor Corp.**

145 Adams Avenue  
Hauppauge, New York 11788



CR1F SERIES  
FAST RECOVERY RECTIFIER  
JEDEC D0-41 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CR1F Series types are Axial Lead Silicon Rectifiers designed for DC Power Supply and Inverter applications where fast recovery times are needed.

MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$  unless otherwise noted)

|                                  | CR1F-005 | CR1F-010 | CR1F-020 | CR1F-040    | CR1F-060 | CR1F-080 | CR1F-100 | CR1F-120 | UNIT             |
|----------------------------------|----------|----------|----------|-------------|----------|----------|----------|----------|------------------|
| $V_{RRM}$                        | 50       | 100      | 200      | 400         | 600      | 800      | 1000     | 1200     | V                |
| $V_R(RMS)$                       | 35       | 70       | 140      | 280         | 420      | 560      | 700      | 840      | V                |
| $I_O$ ( $T_A=80^\circ\text{C}$ ) |          |          |          | 1.5         |          |          |          |          | A                |
| $I_{FSM}$ (8.0ms Duration)       |          |          |          | 50          |          |          |          |          | A                |
| $T_J, T_{stg}$                   |          |          |          | -65 TO +175 |          |          |          |          | $^\circ\text{C}$ |

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

| SYMBOL   | TEST CONDITIONS   | MIN | MAX | UNIT          |
|----------|---|-----|-----|---------------|
| $I_R$    | $V_R=V_{RRM}$   |     | 5.0 | $\mu\text{A}$ |
| $I_R$    | $V_R=V_{RRM}, T_A=100^\circ\text{C}$                                |     | 100 | $\mu\text{A}$ |
| $V_F$    | $I_F=1.0\text{A}$   |     | 1.2 | V             |
| $t_{rr}$ | $I_F=1.0\text{A}, V_R=30\text{V}, (50\text{V thru } 600\text{V})$   |     | 150 | ns            |
| $t_{rr}$ | $I_F=1.0\text{A}, V_R=30\text{V}, (800\text{V thru } 1200\text{V})$ |     | 500 | ns            |

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## 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

#### Corporate Headquarters & Customer Support Team

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