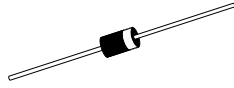


# Central<sup>TM</sup> Semiconductor Corp.

## CRSH2 SERIES

**SCHOTTKY BARRIER RECTIFIER  
2.0 AMPS, 20 THRU 100 VOLTS**



**CASE DO-15**

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CRSH2 Series types are Schottky Barrier Rectifiers mounted in an axial lead epoxy case using a metal to silicon junction to yield a low forward voltage drop.

### MARKING: FULL PART NUMBER

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

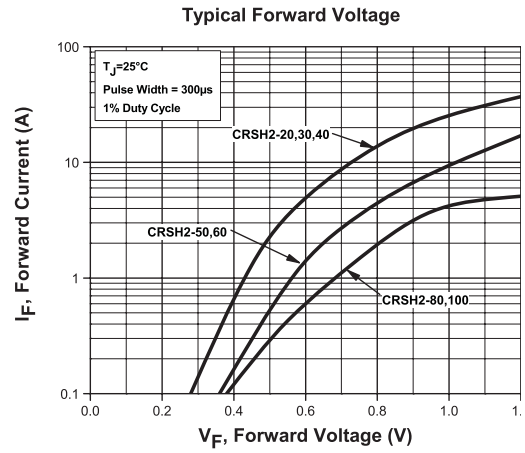
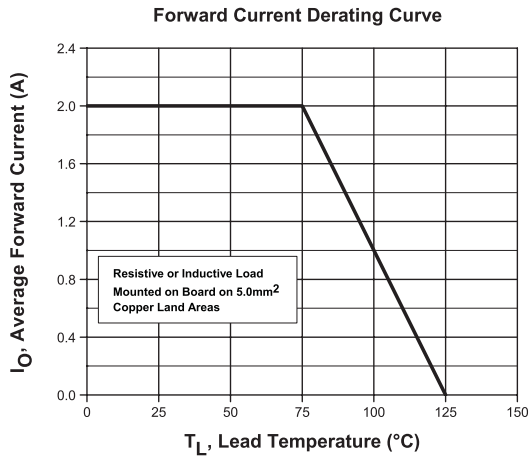
|  | SYMBOL         | CRSH2-   |          |          |             |          |          |           |                    | UNITS |
|--|----------------|----------|----------|----------|-------------|----------|----------|-----------|--------------------|-------|
|  |                | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u>    | <u>6</u> | <u>8</u> | <u>10</u> |                    |       |
| Peak Repetitive Reverse Voltage                    | $V_{RRM}$      | 20       | 30       | 40       | 50          | 60       | 80       | 100       | V                  |       |
| DC Blocking Voltage                                | $V_R$          | 20       | 30       | 40       | 50          | 60       | 80       | 100       | V                  |       |
| RMS Reverse Voltage                                | $V_{R(RMS)}$   | 14       | 21       | 28       | 35          | 42       | 56       | 70        | V                  |       |
| Average Forward Current ( $T_L=75^\circ\text{C}$ ) | $I_O$          |          |          |          | 2.0         |          |          |           | A                  |       |
| Peak Forward Surge Current (8.3ms)                 | $I_{FSM}$      |          |          |          | 50          |          |          |           | A                  |       |
| Operating and Storage Junction Temperature         | $T_J, T_{stg}$ |          |          |          | -65 to +125 |          |          |           | $^\circ\text{C}$   |       |
| Thermal Resistance                                 | $\Theta_{JA}$  |          |          |          | 35          |          |          |           | $^\circ\text{C/W}$ |       |

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

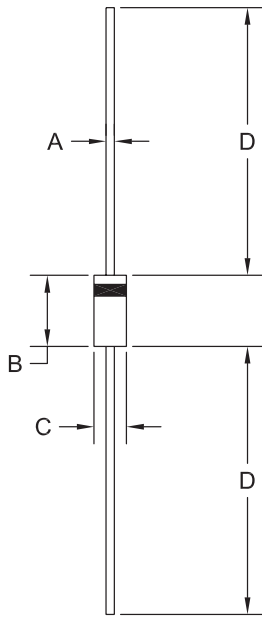
| SYMBOL | TEST CONDITIONS  | TYP | MAX  | UNITS |
|--------|--|-----|------|-------|
| $I_R$  | $V_R=\text{Rated } V_{RRM}$                            |     | 0.5  | mA    |
| $I_R$  | $V_R=\text{Rated } V_{RRM} (T_A=100^\circ\text{C})$    |     | 20   | mA    |
| $V_F$  | $I_F=2.0\text{A} (20\text{V}, 30\text{V}, 40\text{V})$ |     | 0.5  | V     |
| $V_F$  | $I_F=2.0\text{A} (50\text{V}, 60\text{V})$             |     | 0.7  | V     |
| $V_F$  | $I_F=2.0\text{A} (80\text{V}, 100\text{V})$            |     | 0.85 | V     |
| $C_J$  | $V_R=4.0, f=1.0\text{MHz}$                             | 170 |      | pF    |

## CRSH2 SERIES

### SCHOTTKY BARRIER RECTIFIER 2.0 AMPS, 20 THRU 100 VOLTS



### DO-15 CASE - MECHANICAL OUTLINE



R1

| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | 0.028      | 0.034 | 0.71        | 0.86 |
| B      | 0.230      | 0.300 | 5.84        | 7.62 |
| C      | 0.104      | 0.140 | 2.64        | 3.56 |
| D      | 1.000      | -     | 25.40       | -    |

DO-15 (REV: R1)

**MARKING: FULL PART NUMBER**

R2 (24-October 2008)

## 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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### CONTACT US

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