



CMR2U-01  
 CMR2U-02  
 CMR2U-04  
 CMR2U-06

**ULTRA FAST RECOVERY RECTIFIER  
 2.0 AMP, 100 THRU 600 VOLTS**



**SMB CASE**

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

**FEATURES:**

- LOW COST
- SPECIAL SELECTIONS AVAILABLE
- HIGH RELIABILITY
- SUPERIOR LOT TO LOT CONSISTENCY
- GLASS PASSIVATED CHIP
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2.0 Amp Surface Mount Silicon Ultra Fast Recovery Rectifier is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications. To order devices on 12mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

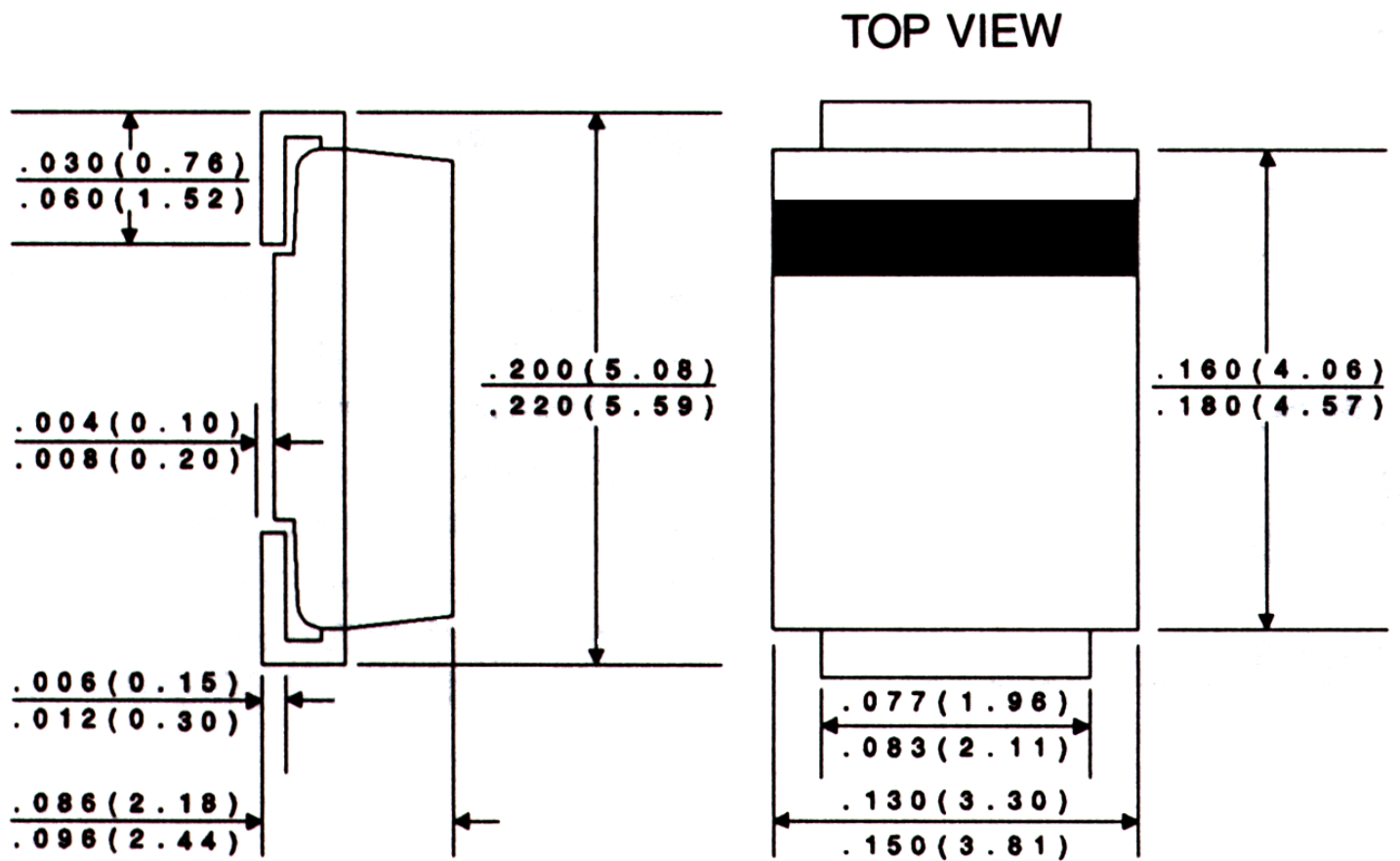
**MAXIMUM RATINGS:** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

|                                                      | SYMBOL         | CMR2U-01 | CMR2U-02    | CMR2U-04 | CMR2U-06 | UNITS                |
|------------------------------------------------------|----------------|----------|-------------|----------|----------|----------------------|
| Peak Repetitive Reverse Voltage                      | $V_{RRM}$      | 100      | 200         | 400      | 600      | V                    |
| DC Blocking Voltage                                  | $V_R$          | 100      | 200         | 400      | 600      | V                    |
| RMS Reverse Voltage                                  | $V_{R(RMS)}$   | 70       | 140         | 280      | 420      | V                    |
| Average Forward Current ( $T_A=50^{\circ}\text{C}$ ) | $I_O$          |          |             | 2.0      |          | A                    |
| Peak Forward Surge Current (8.3ms)                   | $I_{FSM}$      |          |             | 50       |          | A                    |
| Operating and Storage                                |                |          |             |          |          |                      |
| Junction Temperature                                 | $T_J, T_{stg}$ |          | -65 to +150 |          |          | $^{\circ}\text{C}$   |
| Thermal Resistance                                   | $\Theta_{JL}$  |          | 20          |          |          | $^{\circ}\text{C/W}$ |

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

| SYMBOL   | TEST CONDITIONS                                       | MIN | TYP | MAX  | UNITS         |
|----------|-------------------------------------------------------|-----|-----|------|---------------|
| $I_R$    | $V_R$ =Rated $V_{RRM}$                                |     |     | 10   | $\mu\text{A}$ |
| $I_R$    | $V_R$ =Rated $V_{RRM}, T_A=100^{\circ}\text{C}$       |     |     | 50   | $\mu\text{A}$ |
| $V_F$    | $I_F=2.0\text{A}$ , (CMR2U-01, CMR2U-02)              |     |     | 1.00 | V             |
| $V_F$    | $I_F=2.0\text{A}$ , (CMR2U-04)                        |     |     | 1.25 | V             |
| $V_F$    | $I_F=2.0\text{A}$ , (CMR2U-06)                        |     |     | 1.40 | V             |
| $t_{rr}$ | $I_F=0.5\text{A}, I_R=1.0\text{A}$ , Recover to 0.25A |     |     | 50   | ns            |
| $C_J$    | $V_R=4.0\text{V}, f=1.0\text{MHz}$                    |     | 50  |      | pF            |

All dimensions in inches (mm).



**Marking Codes:**

| DEVICE   | MARKING CODE |
|----------|--------------|
| CMR2U-01 | CU201        |
| CMR2U-02 | CU202        |
| CMR2U-04 | CU204        |
| CMR2U-06 | CU206        |