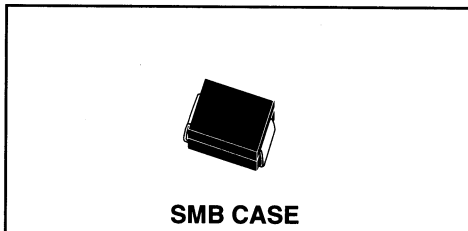


CMR1U-01
CMR1U-02
CMR1U-04
CMR1U-06
NEW! CMR1U-10
ULTRA FAST RECOVERY RECTIFIER
1.0 AMP, 100 THRU 1000 VOLTS



CentralTM
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 1.0 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.

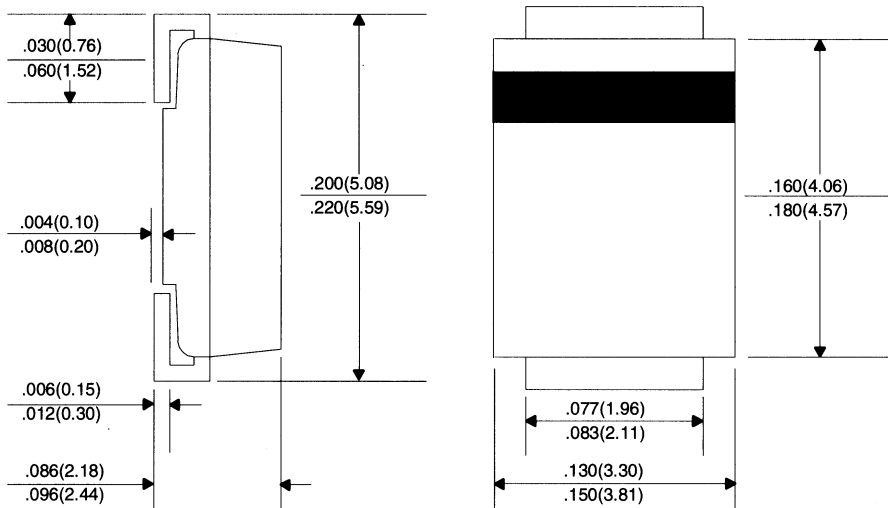
MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| | SYMBOL | CMR1U-01 | CMR1U-02 | CMR1U-04 | CMR1U-06 | CMR1U-10 | UNITS |
|--|----------------|----------|----------|-------------|----------|----------|----------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 1000 | V |
| DC Blocking Voltage | V_R | 100 | 200 | 400 | 600 | 1000 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 70 | 140 | 280 | 420 | 700 | V |
| Average Forward Current ($T_A=75^{\circ}\text{C}$) | 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 +175 | | | $^{\circ}\text{C}$ |
| Thermal Resistance | θ_{JL} | | | 20 | | | $^{\circ}\text{C/W}$ |

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

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|----------|---|-----|------|---------------|
| I_R | $V_R = \text{Rated } V_{RRM}$ | | 5.0 | μA |
| I_R | $V_R = \text{Rated } V_{RRM}, T_A = 125^{\circ}\text{C}$ | | 100 | μA |
| V_F | $I_F = 1.0\text{A}, (\text{CMR1U-01, CMR1U-02})$ | | 1.00 | V |
| V_F | $I_F = 1.0\text{A}, (\text{CMR1U-04})$ | | 1.25 | V |
| V_F | $I_F = 1.0\text{A}, (\text{CMR1U-06})$ | | 1.40 | V |
| V_F | $I_F = 1.0\text{A}, (\text{CMR1U-10})$ | | 1.70 | V |
| t_{rr} | $I_F = 0.5\text{A}, I_R = 1.0\text{A}, \text{Recover to } 0.25\text{A} (\text{CMR1U-01, -02, -04})$ | | 50 | ns |
| t_{rr} | $I_F = 0.5\text{A}, I_R = 1.0\text{A}, \text{Recover to } 0.25\text{A} (\text{CMR1U-06, -10})$ | | 100 | ns |

All dimensions in inches (mm).



Marking Codes:

| DEVICE | MARKING CODE |
|----------|--------------|
| CMR1U-01 | CU01 |
| CMR1U-02 | CU02 |
| CMR1U-04 | CU04 |
| CMR1U-06 | CU06 |
| CMR1U-10 | CU10 |

DATA SHEET

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