

CMSH3-20  
 CMSH3-40  
 CMSH3-60  
 CMSH3-100

**SCHOTTKY BARRIER RECTIFIER  
 3.0 AMP, 20 THRU 100 VOLTS**



**SMC CASE**

# Central™

**Semiconductor Corp.**

**FEATURES:**

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 3.0 Amp Surface Mount Silicon Schottky 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 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

**MARKING CODES: SEE MARKING CODE TABLE ON FOLLOWING PAGE**

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

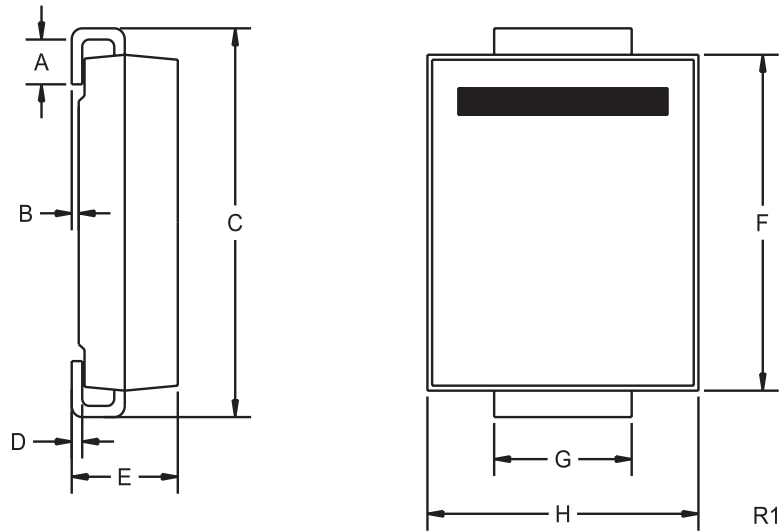
|  | SYMBOL         | CMSH3      | CMSH3       | CMSH3      | CMSH3       | UNITS              |
|--|----------------|------------|-------------|------------|-------------|--------------------|
|  |                | <u>-20</u> | <u>-40</u>  | <u>-60</u> | <u>-100</u> |                    |
| Peak Repetitive Reverse Voltage                    | $V_{RRM}$      | 20         | 40          | 60         | 100         | V                  |
| DC Blocking Voltage                                | $V_R$          | 20         | 40          | 60         | 100         | V                  |
| RMS Reverse Voltage                                | $V_{R(RMS)}$   | 14         | 28          | 42         | 71          | V                  |
| Average Forward Current ( $T_A=75^\circ\text{C}$ ) | $I_O$          |            |             | 3.0        |             | A                  |
| Peak Forward Surge Current (8.3ms)                 | $I_{FSM}$      |            |             | 150        |             | A                  |
| Operating and Storage                              |                |            |             |            |             |                    |
| Junction Temperature                               | $T_J, T_{stg}$ |            | -65 to +150 |            |             | $^\circ\text{C}$   |
| Thermal Resistance                                 | $\Theta_{JL}$  |            | 10          |            |             | $^\circ\text{C/W}$ |

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

| SYMBOL | TEST CONDITIONS                              | MIN | TYP | MAX  | UNITS         |
|--------|--|-----|-----|------|---------------|
| $I_R$  | $V_R=Rated$ $V_{RRM}$                        |     |     | 500  | $\mu\text{A}$ |
| $I_R$  | $V_R=Rated$ $V_{RRM}, T_A=100^\circ\text{C}$ |     |     | 20   | mA            |
| $V_F$  | $I_F=3.0\text{A}$ (CMSH3-20 AND CMSH3-40)    |     |     | 0.50 | V             |
| $V_F$  | $I_F=3.0\text{A}$ (CMSH3-60)                 |     |     | 0.70 | V             |
| $V_F$  | $I_F=3.0\text{A}$ (CMSH3-100)                |     |     | 0.80 | V             |

**SCHOTTKY BARRIER RECTIFIER**  
**3.0 AMP, 20 THRU 100 VOLTS**

**SMC CASE - MECHANICAL OUTLINE**



| DEVICE    | MARKING CODE |
|-----------|--------------|
| CMSH3-20  | CS320        |
| CMSH3-40  | CS340        |
| CMSH3-60  | CS360        |
| CMSH3-100 | CS3100       |

| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | 0.030      | 0.060 | 0.76        | 1.52 |
| B      | 0.004      | 0.008 | 0.10        | 0.20 |
| C      | 0.305      | 0.320 | 7.75        | 8.13 |
| D      | 0.006      | 0.012 | 0.15        | 0.31 |
| E      | 0.079      | 0.103 | 2.00        | 2.62 |
| F      | 0.260      | 0.280 | 6.60        | 7.11 |
| G      | 0.108      | 0.124 | 2.75        | 3.15 |
| H      | 0.220      | 0.245 | 5.59        | 6.22 |

SMC (REV: R1)

R2 (14-November 2002)



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