

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

**SURFACE MOUNT  
 SILICON SCHOTTKY RECTIFIER  
 3 AMP, 20 THRU 100 VOLTS**



**SMC CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH3-20 series 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 CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE**

**FEATURES:**

- Low cost
- Superior lot to lot consistency
- High reliability
- Special selections available
- "C" bend construction provides strain relief when mounted on pc board

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

|  | SYMBOL        | CMSH3<br><u>-20</u> | CMSH3<br><u>-40</u> | CMSH3<br><u>-60</u> | CMSH3<br><u>-100</u> | UNITS              |
|--|---------------|---------------------|---------------------|---------------------|----------------------|--------------------|
| 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, $t_p=8.3\text{ms}$     | $I_{FSM}$     |                     |                     | 150                 |                      | A                  |
| Operating Junction Temperature                     | $T_J$         |                     | -65 to +150         |                     |                      | $^\circ\text{C}$   |
| Storage Temperature                                | $T_{stg}$     |                     | -65 to +175         |                     |                      | $^\circ\text{C}$   |
| Thermal Resistance                                 | $\theta_{JL}$ |                     | 10                  |                     |                      | $^\circ\text{C/W}$ |

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

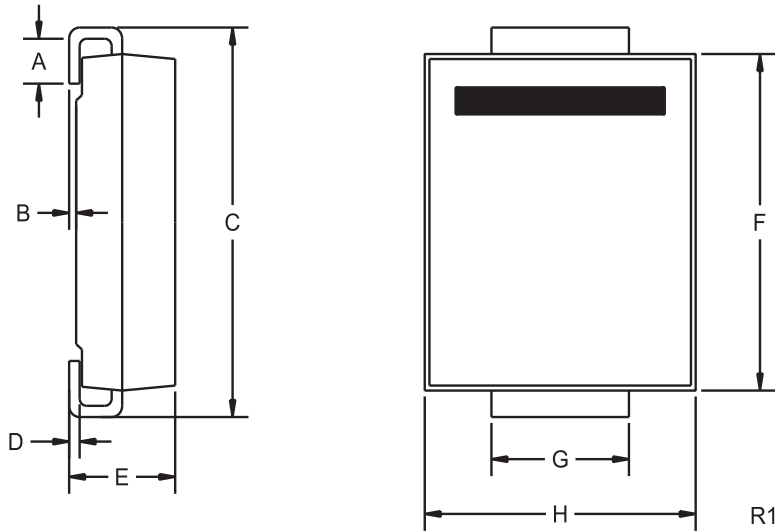
| SYMBOL | TEST CONDITIONS                                    | MAX  | UNITS         |
|--------|--|------|---------------|
| $I_R$  | $V_R=\text{Rated } V_{RRM}$                        | 500  | $\mu\text{A}$ |
| $I_R$  | $V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$ | 20   | mA            |
| $V_F$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

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**SMC CASE - MECHANICAL OUTLINE**



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

| SYMBOL | 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)

R4 (18-June 2012)