

CMSH2-20 CMSH2-60  
 CMSH2-40 CMSH2-100

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



**SMB CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH2-20 Series 2.0 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 12mm 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         | CMSH2<br>-20 | CMSH2<br>-40 | CMSH2<br>-60 | CMSH2<br>-100 | 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 ( $T_A=55^\circ\text{C}$ ) | $I_O$          |              |              | 2.0          |               | A                  |
| Peak Forward Surge Current, $t_p=8.3\text{ms}$     | $I_{FSM}$      |              |              | 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                                      | TYP | MAX  | UNITS |
|--------|--|-----|------|-------|
| $I_R$  | $V_R=\text{Rated } V_{RRM}$                          |     | 0.50 | mA    |
| $I_R$  | $V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$   |     | 20   | mA    |
| $V_F$  | $I_F=2.0\text{A (CMSH2-20, -40)}$                    |     | 0.50 | V     |
| $V_F$  | $I_F=2.0\text{A (CMSH2-60)}$                         |     | 0.70 | V     |
| $V_F$  | $I_F=2.0\text{A (CMSH2-100)}$                        |     | 0.85 | V     |
| $C_J$  | $V_R=4.0\text{V}, f=1.0\text{MHz, (CMSH2-20, -40)}$  | 150 |      | pF    |
| $C_J$  | $V_R=4.0\text{V}, f=1.0\text{MHz, (CMSH2-60, -100)}$ | 120 |      | pF    |

CMSH2-20    CMSH2-60  
 CMSH2-40    CMSH2-100



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**SMB CASE - MECHANICAL OUTLINE**



| DEVICE    | MARKING CODE |
|-----------|--------------|
| CMSH2-20  | CS220        |
| CMSH2-40  | CS240        |
| CMSH2-60  | CS260        |
| CMSH2-100 | CS2100       |

| 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      | 0.006      | 0.012 | 0.15        | 0.30 |
| D      | 0.086      | 0.096 | 2.18        | 2.44 |
| E      | 0.200      | 0.220 | 5.08        | 5.59 |
| F      | 0.130      | 0.150 | 3.30        | 3.81 |
| G      | 0.077      | 0.083 | 1.96        | 2.11 |
| H      | 0.160      | 0.180 | 4.06        | 4.57 |

SMB (REV: R1)

R4 (8-February 2010)