

CMSH5-100HV  
CMSH5-150HV  
CMSH5-200HV

**SURFACE MOUNT  
SILICON SCHOTTKY RECTIFIER  
5 AMP, 100 THRU 200 VOLTS**



**SMC CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH5-100HV Series 5.0 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 lighting 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:**

- High voltage capability
- Flammability classification UL94V-0
- Energy efficiency
- High reliability
- "C" bend construction provides strain relief when mounted on PC board

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

|                                                    | SYMBOL         | CMSH5<br>-100HV | CMSH5<br>-150HV | CMSH5<br>-200HV | UNITS              |
|----------------------------------------------------|----------------|-----------------|-----------------|-----------------|--------------------|
| Peak Repetitive Reverse Voltage                    | $V_{RRM}$      | 100             | 150             | 200             | V                  |
| DC Blocking Voltage                                | $V_R$          | 100             | 150             | 200             | V                  |
| RMS Reverse Voltage                                | $V_{R(RMS)}$   | 70              | 105             | 140             | V                  |
| Average Forward Current ( $T_L=75^\circ\text{C}$ ) | $I_O$          |                 | 5.0             |                 | A                  |
| Peak Forward Surge Current, $t_p=8.3\text{ms}$     | $I_{FSM}$      |                 | 100             |                 | A                  |
| Operating and Storage Junction Temperature         | $T_J, T_{stg}$ |                 | -65 to +175     |                 | $^\circ\text{C}$   |
| Thermal Resistance                                 | $\Theta_{JL}$  |                 | 55              |                 | $^\circ\text{C/W}$ |

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

| SYMBOL | TEST CONDITIONS                                    | MIN | MAX  | UNITS         |
|--------|----------------------------------------------------|-----|------|---------------|
| $I_R$  | $V_R=\text{Rated } V_{RRM}$                        |     | 50   | $\mu\text{A}$ |
| $I_R$  | $V_R=\text{Rated } V_{RRM}, T_J=100^\circ\text{C}$ |     | 10   | mA            |
| $V_F$  | $I_F=5.0\text{A (CMSH5-100HV)}$                    |     | 0.80 | V             |
| $V_F$  | $I_F=5.0\text{A (CMSH5-150HV, -200HV)}$            |     | 0.90 | V             |

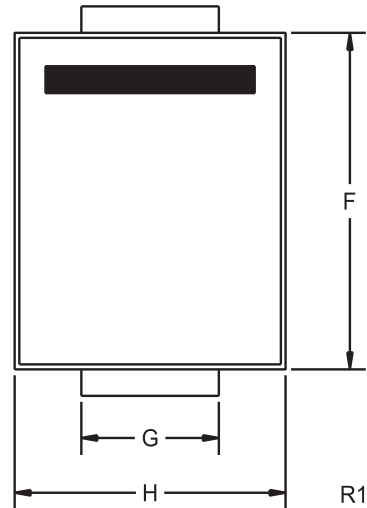
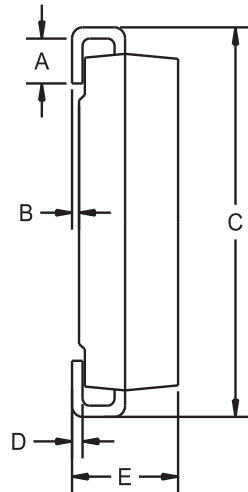
R1 (22-July 2011)

CMSH5-100HV  
CMSH5-150HV  
CMSH5-200HV

SURFACE MOUNT  
SILICON SCHOTTKY RECTIFIER  
5 AMP, 100 THRU 200 VOLTS



# SMC CASE - MECHANICAL OUTLINE



| DEVICE      | MARKING CODE |
|-------------|--------------|
| CMSH5-100HV | CS510HV      |
| CMSH5-150HV | CS515HV      |
| CMSH5-200HV | CS520HV      |

| 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)

R1 (22-July 2011)