

CMSH1-20  
 CMSH1-40  
 CMSH1-60  
 CMSH1-100



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



**SMB CASE**

**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 1.0 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.

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

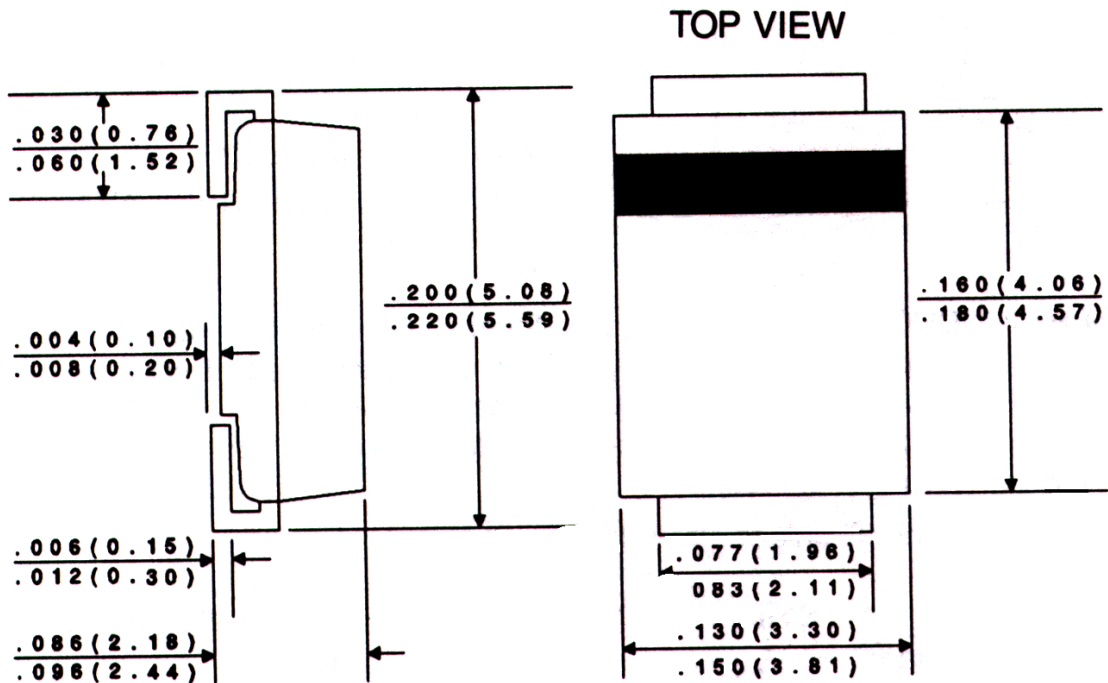
|  |                | CMSH1<br>-20 | CMSH1<br>-40 | CMSH1<br>-60 | CMSH1<br>-100 | UNITS              |
|--|----------------|--------------|--------------|--------------|---------------|--------------------|
| Peak Repetitive Reverse Voltage                    | $V_{RRM}$      | 20           | 40           | 60           | 100           | V                  |
| DC Blocking Voltage                                | $V_R$          | 20           | 40           | 60           | 100           | V                  |
| RMS Reverse Voltage                                | $V_{R(RMS)}$   | 14           | 28           | 42           | 70            | 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 +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                                    | MIN | TYP | MAX  | UNITS |
|--------|--|-----|-----|------|-------|
| $V_F$  | $I_F=1.0\text{A}$ (CMSH1-20 AND CMSH1-40)          |     |     | 0.55 | V     |
| $V_F$  | $I_F=1.0\text{A}$ (CMSH1-60)                       |     |     | 0.70 | V     |
| $V_F$  | $I_F=1.0\text{A}$ (CMSH1-100)                      |     |     | 0.85 | V     |
| $I_R$  | $V_R=\text{Rated } V_{RRM}$                        |     |     | 0.50 | mA    |
| $I_R$  | $V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$ |     |     | 20   | mA    |

| SYMBOL         | TEST CONDITIONS   | MIN | TYP | MAX | UNITS |
|----------------|---|-----|-----|-----|-------|
| C <sub>J</sub> | V <sub>R</sub> =4.0V, f=1.0MHz, (CMSH1-20 AND CMSH1-40) |     | 110 |     | pF    |
| C <sub>J</sub> | V <sub>R</sub> =4.0V, f=1.0MHz, (CMSH1-60)              |     | 80  |     | pF    |
| C <sub>J</sub> | V <sub>R</sub> =4.0V, f=1.0MHz, (CMSH1-100)             |     | 50  |     | pF    |

All dimensions in inches (mm).



**Marking Codes:**

| DEVICE    | MARKING CODE |
|-----------|--------------|
| CMSH1-20  | CS20         |
| CMSH1-40  | CS40         |
| CMSH1-60  | CS60         |
| CMSH1-100 | CS100        |