



CMSH1-20M
CMSH1-40M
CMSH1-60M

SCHOTTKY BARRIER RECTIFIER
1.0 AMP, 20 THRU 60 VOLTS

SUPER
mini



SMA CASE

CentralTM
 Semiconductor Corp.

FEATURES:

- SUPER MINIATURE CASE
- SUPERIOR LOT TO LOT CONSISTENCY
- LOW COST
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD
- HIGH RELIABILITY
- 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 where small size is required. The SMA case occupies 30% less board space than the SMB case. To order devices on 12mm Tape and Reel (5000/13" Reel), add TR13 suffix to part number.

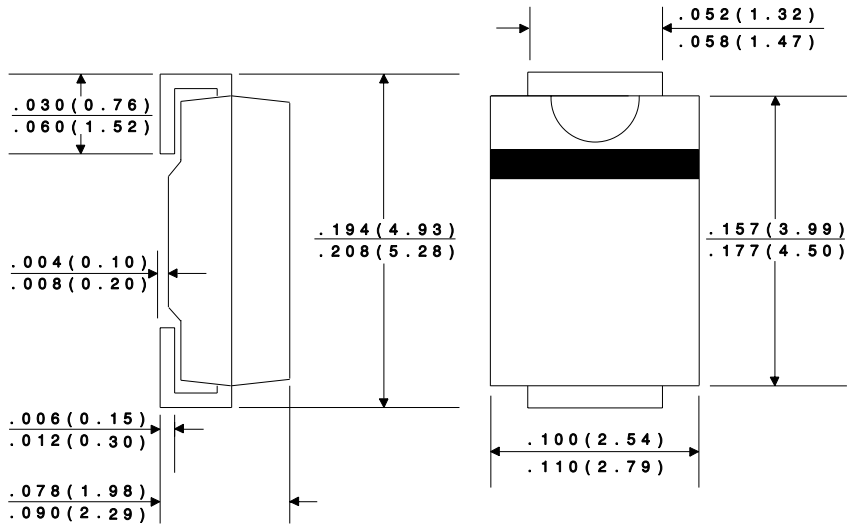
MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| | SYMBOL | CMSH1-20M | CMSH1-40M | CMSH1-60M | UNITS |
|--|----------------|-----------|-------------|-----------|----------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 20 | 40 | 60 | V |
| DC Blocking Voltage | V_R | 20 | 40 | 60 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 14 | 28 | 42 | V |
| Average Forward Current($T_L=75^{\circ}\text{C}$) | I_O | 1.0 | 1.0 | | A |
| Average Forward Current($T_L=100^{\circ}\text{C}$) | I_O | | | 1.0 | A |
| Peak Forward Surge Current (8.3ms) | I_{FSM} | 30 | 30 | 30 | A |
| Operating and Storage | | | | | |
| Junction Temperature | T_J, T_{stg} | | -65 to +150 | | $^{\circ}\text{C}$ |
| Thermal Resistance | Θ_{JL} | 30 | 30 | 30 | $^{\circ}\text{C/W}$ |

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

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------|--|-----|-----|------|-------|
| V_F | $I_F=1.0\text{A}$ (CMSH1-20M AND CMSH1-40M) | | | 0.50 | V |
| V_F | $I_F=1.0\text{A}$ (CMSH1-60M) | | | 0.70 | V |
| I_R | $V_R=\text{Rated } V_{RRM}$ | | | 0.50 | mA |
| I_R | $V_R=\text{Rated } V_{RRM}, T_A=100^{\circ}\text{C}$ | | | 10 | mA |
| C_J | $V_R=4.0\text{V}, f=1.0\text{MHz}$, (CMSH1-20M AND CMSH1-40M) | 100 | | | pF |
| C_J | $V_R=4.0\text{V}, f=1.0\text{MHz}$, (CMSH1-60M) | | 80 | | pF |

All dimensions in inches (mm).



| DEVICE | MARKING CODE |
|-----------|--------------|
| CMSH1-20M | CS20M |
| CMSH1-40M | CS40M |
| CMSH1-60M | CS60M |