

CentralTM

Semiconductor Corp.

CMSH1-20ML
CMSH1-40ML

SCHOTTKY BARRIER RECTIFIER
1.0 AMP, 20 & 100 VOLTS

LOW
V_F



SMA CASE

FEATURES:

- EXTREMELY LOW FORWARD VOLTAGE DROP
- SUPERIOR LOT TO LOT CONSISTENCY
- HIGH RELIABILITY
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD
- LOW COST

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH1-20ML Series are Surface Mount Silicon Schottky Rectifiers designed for applications where extremely low forward voltage drop is required. To order devices on 12mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

MARKING CODES:

CMSH1-20ML: CS20ML

CMSH1-40ML : CS40ML

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

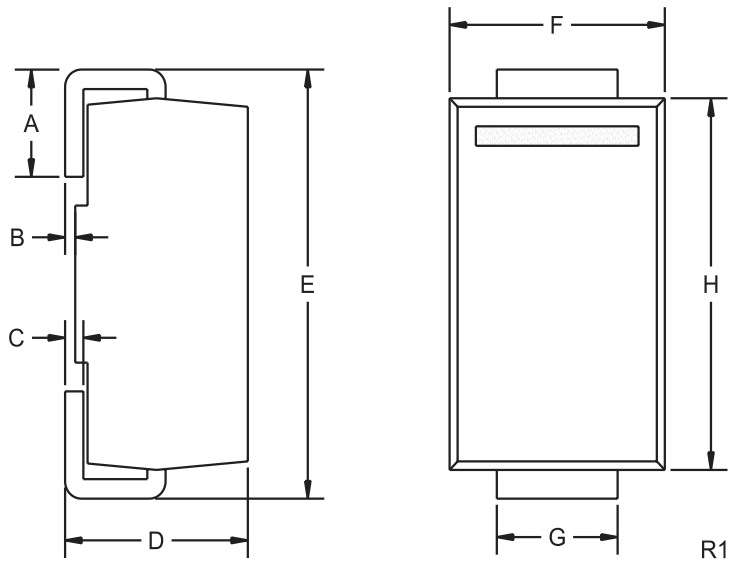
| | SYMBOL | CMSH1-20ML | CMSH1-40ML | UNITS |
|------------------------------------|-----------------------------------|-------------|------------|-------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 20 | 40 | V |
| DC Blocking Voltage | V _R | 20 | 40 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 14 | 28 | V |
| Average Forward Current | 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 | | °C |
| Thermal Resistance | θ _{JL} | 28 | | °C/W |
| Thermal Resistance | θ _{JA} | 88 | | °C/W |

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|----------------|---|-----|-----|------|-------|
| I _R | V _R =Rated V _{RRM} | | | 0.5 | mA |
| I _R | V _R = Rated V _{RRM} , T _C =100°C | | | 20 | mA |
| V _F | I _F =1.0A (CMSH1-20ML) | | | 0.38 | V |
| V _F | I _F =1.0A (CMSH1-40ML) | | | 0.40 | V |

R3 (26-September 2002)

SMA CASE - MECHANICAL OUTLINE



| DEVICE | MARKING CODE |
|------------|--------------|
| CMSH1-20ML | CS20ML |
| CMSH1-40ML | CS40ML |

| 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 | 0.078 | 0.103 | 1.98 | 2.62 |
| E | 0.188 | 0.220 | 4.78 | 5.59 |
| F | 0.090 | 0.115 | 2.29 | 2.92 |
| G | 0.050 | 0.070 | 1.27 | 1.78 |
| H | 0.157 | 0.181 | 3.99 | 4.60 |

SMA (REV: R1)