

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

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



**SMA CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH1-20M Series 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 (5000/13" Reel), add TR13 to suffix of part number.

**MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE**

**FEATURES:**

- Superior lot to lot consistency
- Low cost
- High reliability
- Special selections available
- "C" bend construction provides strain relief when mounted on pc board

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL	CMSH1 -20M	CMSH1 -40M	CMSH1 -60M	CMSH1 -100M	UNITS
Peak Repetitive Reverse Voltage	V <sub>R</sub> RRM	20	40	60	100	V
DC Blocking Voltage	V <sub>R</sub>	20	40	60	100	V
RMS Reverse Voltage	V <sub>R</sub> (RMS)	14	28	42	70	V
Average Forward Current (T <sub>L</sub> =75°C)	I <sub>O</sub>	1.0	1.0			A
Average Forward Current (T <sub>L</sub> =100°C)	I <sub>O</sub>			1.0	1.0	A
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>			30		A
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>			-65 to +150		°C
Thermal Resistance	θ <sub>JL</sub>			30		°C/W

**ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>R</sub> RRM		0.50	mA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>R</sub> RRM, T <sub>A</sub> =100°C		10	mA
V <sub>F</sub>	I <sub>F</sub> =1.0A (CMSH1-20M, -40M)		0.50	V
V <sub>F</sub>	I <sub>F</sub> =1.0A (CMSH1-60M)		0.70	V
V <sub>F</sub>	I <sub>F</sub> =1.0A (CMSH1-100M)		0.85	V
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz, (CMSH1-20M, -40M)	100		pF
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz, (CMSH1-60M)	80		pF
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz, (CMSH1-100M)	50		pF

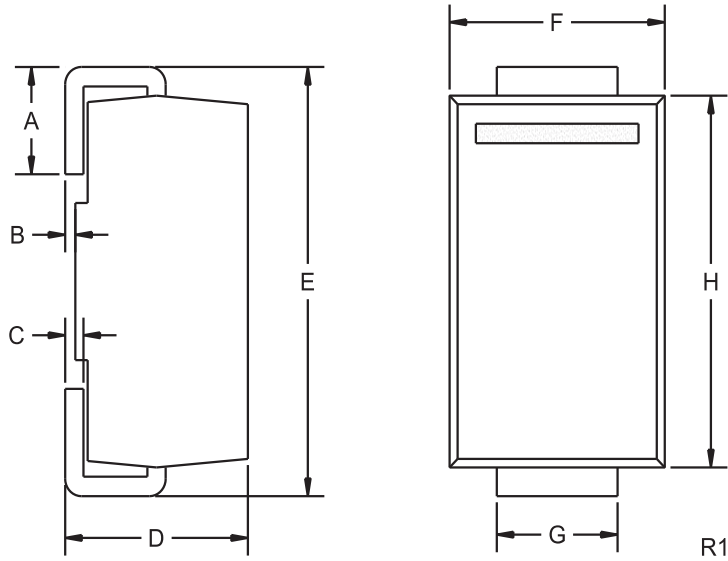
R5 (8-February 2010)

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**SMA CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMSH1-20M	CS20M
CMSH1-40M	CS40M
CMSH1-60M	CS60M
CMSH1-100M	CS100M

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)

R5 (8-February 2010)