

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

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



**SMB CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH1-20 Series 1.0 Amp Surface Mount Silicon 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.

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

**FEATURES:**

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

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

	SYMBOL	CMSH1 -20	CMSH1 -40	CMSH1 -60	CMSH1 -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, $t_p=8.3\text{ms}$	$I_{FSM}$			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	TYP	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$		0.50	mA
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$		20	mA
$V_F$	$I_F=1.0\text{A (CMSH1-20, -40)}$		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
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz, (CMSH1-20, -40)}$	110		pF
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz, (CMSH1-60)}$	80		pF
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz, (CMSH1-100)}$	50		pF

R3 (8-February 2010)

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**SMB CASE - MECHANICAL OUTLINE**



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

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	0.086	0.096	2.18	2.44
E	0.200	0.220	5.08	5.59
F	0.130	0.150	3.30	3.81
G	0.077	0.083	1.96	2.11
H	0.160	0.180	4.06	4.57

SMB (REV: R1)

R3 (8-February 2010)