

CMSH3-20L  
CMSH3-40L

SURFACE MOUNT  
LOW  $V_F$   
SILICON SCHOTTKY RECTIFIER  
4 AMP, 20 AND 40 VOLTS

LOW  
 $V_F$



SMC CASE



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 4.0 Amp Surface Mount Low  $V_F$  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 high efficiency is required. To order devices on 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

**MARKING CODES: CMSH3-20L: CS320L  
CMSH3-40L: CS340L**

**FEATURES:**

- New upgraded 4.0 Amp average forward current (upgraded from 3.0 Amps)
- Low forward voltage drop
- Flammability classification UL94V-0
- High current capability
- Superior lot to lot consistency
- Low cost
- High reliability
- "C" bend construction provides strain relief when mounted on a PC board

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

	SYMBOL	CMSH3-20L	CMSH3-40L	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 ( $T_L=90^\circ\text{C}$ )	$I_O$		4.0	A
* Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$		150	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$	14		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$	0.50	mA
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$	35	mA
* $V_F$	$I_F=4.0\text{A (CMSH3-20L)}$	0.42	V
* $V_F$	$I_F=4.0\text{A (CMSH3-40L)}$	0.44	V
$V_F$	$I_F=3.0\text{A (CMSH3-20L)}$	0.38	V
$V_F$	$I_F=3.0\text{A (CMSH3-40L)}$	0.40	V

\* Upgraded Specification

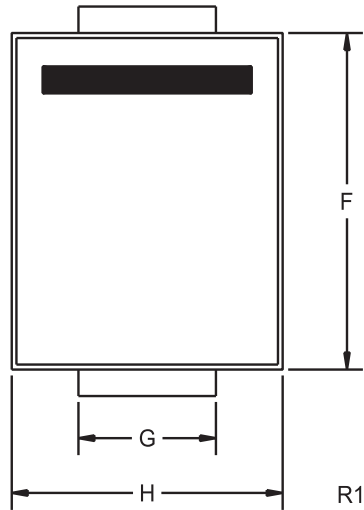
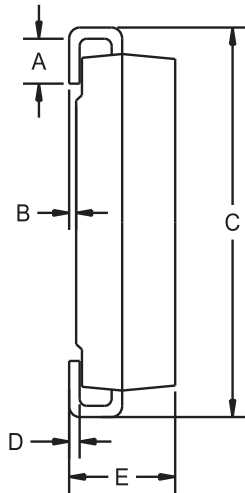
R4 (8-February 2010)

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SMC CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSH3-20L	CS320L
CMSH3-40L	CS340L

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	0.305	0.320	7.75	8.13
D	0.006	0.012	0.15	0.31
E	0.079	0.103	2.00	2.62
F	0.260	0.280	6.60	7.11
G	0.108	0.124	2.75	3.15
H	0.220	0.245	5.59	6.22

SMC (REV: R1)

R4 (8-February 2010)