

CMSH3-20L
CMSH3-40L

SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY RECTIFIERS
4.0 AMP, 20 AND 40 VOLT

LOW
 V_F



SMC CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH3-20L and CMSH3-40L 4.0 Amp surface mount low V_F silicon Schottky rectifiers are highly reliable components 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:

- 4.0 Amp average forward current (upgraded from 3.0 Amps)
- Low forward voltage drop
- High current capability
- High reliability
- Flammability classification UL94V-0
- "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	θ_{JL}	14		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	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

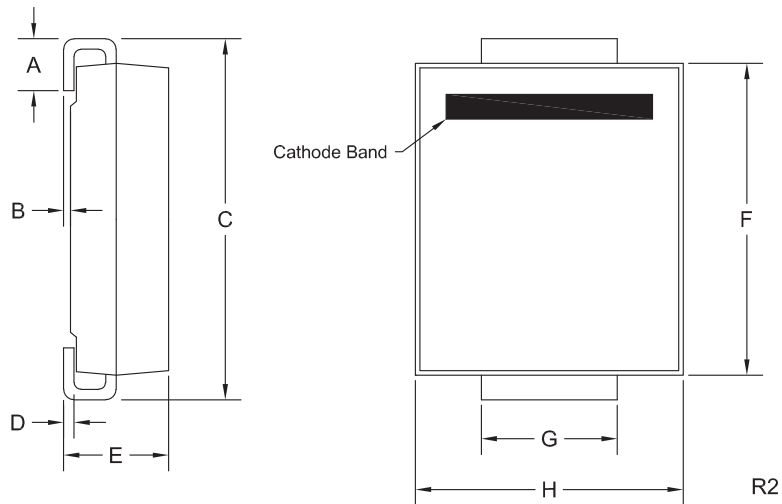
R5 (11-September 2013)

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SMC CASE - MECHANICAL OUTLINE



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

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.002	0.008	0.05	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	0.128	2.75	3.25
H	0.220	0.245	5.59	6.22

SMC (REV: R2)

R5 (11-September 2013)