

CMSH3-20MA CMSH3-60MA  
CMSH3-40MA CMSH3-100MA

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



**SMA CASE**



[www.centra-semi.com](http://www.centra-semi.com)

#### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH3-20MA Series 3.0 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 suffix to part number.

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

#### FEATURES:

- High current capability
- High reliability
- Flammability classification UL94V-0
- "C" bend construction provides strain relief when mounted on pc board
- Superior lot to lot consistency
- Low cost

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

	SYMBOL	CMSH3 -20MA	CMSH3 -40MA	CMSH3 -60MA	CMSH3 -100MA	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	71	V
Average Forward Current ( $T_L=75^{\circ}\text{C}$ )	$I_O$			3.0		A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$			80		A
Operating and Storage Junction Temperature	$T_J, T_{stg}$			-65 to +150		$^{\circ}\text{C}$
Thermal Resistance	$\Theta_{JL}$			30		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$		500	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^{\circ}\text{C}$		20	mA
$V_F$	$I_F=3.0\text{A}$ (CMSH3-20MA, -40MA)		0.50	V
$V_F$	$I_F=3.0\text{A}$ (CMSH3-60MA)		0.70	V
$V_F$	$I_F=3.0\text{A}$ (CMSH3-100MA)		0.85	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	280		pF

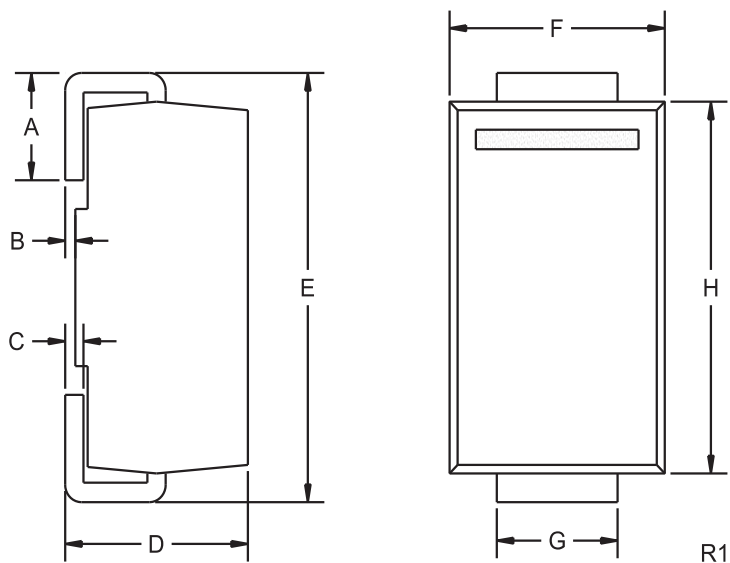
R2 (8-February 2010)

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# **SMA CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMSH3-20MA	CS320MA
CMSH3-40MA	CS340MA
CMSH3-60MA	CS360MA
CMSH3-100MA	CS3100MA

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)

R2 (8-February 2010)