

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

**SURFACE MOUNT SILICON  
 SCHOTTKY RECTIFIERS  
 3.0 AMP, 20 THRU 100 VOLT**



**SMA CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH3-20MA series 3.0 Amp surface mount silicon Schottky rectifier is a well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

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

**FEATURES:**

- High current capability
- Flammability classification UL94V-0
- High reliability

**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

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**SMA CASE - MECHANICAL OUTLINE**



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

SYMBOL	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: R2)

R3 (6-May 2015)

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#### **SERVICES**

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R3 (6-May 2015)

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