

CMSH1-20ML  
CMSH1-40ML

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



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH1-20ML series are surface mount silicon Schottky rectifiers designed for applications where extremely low forward voltage drop is required.

**MARKING CODES:** CMSH1-20ML: CS20ML  
CMSH1-40ML: CS40ML

LOW  
 $V_F$



SMA CASE

**FEATURES:**

- Extremely low forward voltage drop
- High reliability

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

	SYMBOL	CMSH1-20ML	CMSH1-40ML	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	40	V
DC Blocking Voltage	$V_R$	20	40	V
RMS Reverse Voltage	$V_R(\text{RMS})$	14	28	V
Average Forward Current	$I_O$		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	$\theta_{JL}$	28		$^\circ\text{C/W}$
Thermal Resistance	$\theta_{JA}$	88		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$	0.5	mA
$I_R$	$V_R=\text{Rated } V_{RRM}, T_C=100^\circ\text{C}$	20	mA
$V_F$	$I_F=1.0\text{A (CMSH1-20ML)}$	0.38	V
$V_F$	$I_F=1.0\text{A (CMSH1-40ML)}$	0.40	V

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SMA CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSH1-20ML	CS20ML
CMSH1-40ML	CS40ML

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)

R5 (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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R5 (6-May 2015)