

CMSH1-20ML
CMSH1-40ML

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



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	θ_{JL}	28		$^\circ\text{C/W}$
Thermal Resistance	θ_{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
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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)