

CMSH1-40HE CMSH1-100HE  
 CMSH1-60HE CMSH1-150HE  
 CMSH1-80HE CMSH1-200HE

**SURFACE MOUNT SILICON  
 SCHOTTKY RECTIFIERS  
 1.0 AMP, 40 THRU 200 VOLT**



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH1-40HE series 1.0 Amp surface mount silicon Schottky rectifier is a highly efficiency component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

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



**SMA CASE**

**FEATURES:**

- High reliability
- High efficiency Schottky rectifier
- 40V to 200V range
- Low leakage current
- Low  $V_F$

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

	SYMBOL	CMSH1						UNITS
		-40HE	-60HE	-80HE	-100HE	-150HE	-200HE	
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	60	80	100	150	200	V
DC Blocking Voltage	$V_R$	40	60	80	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	42	56	70	105	140	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	$\theta_{JL}$	30						$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MAX	UNITS
$I_R$	$V_R$ =Rated $V_{RRM}$	50	$\mu\text{A}$
$I_R$	$V_R$ =Rated $V_{RRM}$ , $T_A=100^\circ\text{C}$	20	mA
$V_F$	$I_F=1.0\text{A}$ (CMSH1-40HE)	0.70	V
$V_F$	$I_F=1.0\text{A}$ (CMSH1-60HE)	0.74	V
$V_F$	$I_F=1.0\text{A}$ (CMSH1-80HE, -100HE)	0.80	V
$V_F$	$I_F=1.0\text{A}$ (CMSH1-150HE, -200HE)	0.90	V

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**SMA CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMSH1-40HE	CS40HE
CMSH1-60HE	CS60HE
CMSH1-80HE	CS80HE
CMSH1-100HE	CS100HE
CMSH1-150HE	CS150HE
CMSH1-200HE	CS200HE

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)

R2 (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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R2 (6-May 2015)