

CMSH5-100HV  
 CMSH5-150HV  
 CMSH5-200HV

**SURFACE MOUNT SILICON  
 SCHOTTKY RECTIFIERS  
 5.0 AMP, 100 THRU 200 VOLT**



**SMC CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH5-100HV series 5.0 Amp surface mount silicon Schottky rectifiers are highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and lighting applications. To order devices on 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

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

**FEATURES:**

- High voltage capability
- High reliability
- Energy efficiency
- Flammability classification UL94V-0
- "C" bend construction provides strain relief when mounted on PC board

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

	SYMBOL	CMSH5 -100HV	CMSH5 -150HV	CMSH5 -200HV	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	150	200	V
DC Blocking Voltage	$V_R$	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	105	140	V
Average Forward Current ( $T_L=75^\circ\text{C}$ )	$I_O$		5.0		A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$		100		A
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +175		$^\circ\text{C}$
Thermal Resistance (Note 1)	$\theta_{JA}$		50		$^\circ\text{C/W}$
Thermal Resistance (Note 1)	$\theta_{JL}$		10		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$		50	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_J=100^\circ\text{C}$		10	mA
$V_F$	$I_F=5.0\text{A (CMSH5-100HV)}$		0.80	V
$V_F$	$I_F=5.0\text{A (CMSH5-150HV, -200HV)}$		0.90	V

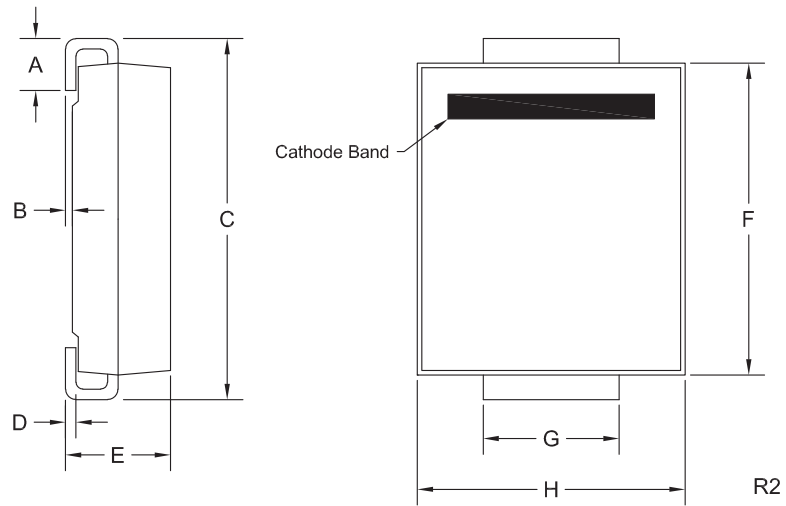
Notes: (1) FR-4 epoxy PCB with copper mounting pad area of 25.4mm<sup>2</sup>.

CMSH5-100HV  
 CMSH5-150HV  
 CMSH5-200HV



**SURFACE MOUNT SILICON  
 SCHOTTKY RECTIFIERS  
 5.0 AMP, 100 THRU 200 VOLT**

**SMC CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMSH5-100HV	CS510HV
CMSH5-150HV	CS515HV
CMSH5-200HV	CS520HV

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.002	0.008	0.05	0.20
C	0.305	0.320	7.75	8.13
D	0.006	0.012	0.15	0.31
E	0.079	0.103	2.00	2.62
F	0.260	0.280	6.60	7.11
G	0.108	0.128	2.75	3.25
H	0.220	0.245	5.59	6.22

SMC (REV: R2)

R3 (11-September 2013)