

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

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



SMC CASE



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)	θ_{JA}		50		$^\circ\text{C/W}$
Thermal Resistance (Note 1)	θ_{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	μA
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

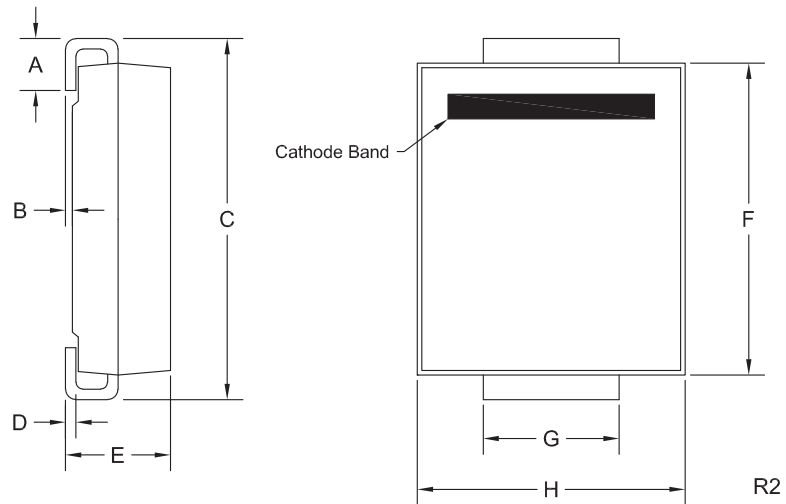
Notes: (1) FR-4 epoxy PCB with copper mounting pad area of 25.4mm².

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SMC CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSh5-100HV	CS510HV
CMSh5-150HV	CS515HV
CMSh5-200HV	CS520HV

SYMBOL	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)