

CMMSH1-20
 CMMSH1-40
 CMMSH1-60
 CMMSH1-100

**SURFACE MOUNT SILICON
 SCHOTTKY RECTIFIERS
 1.0 AMP, 20 THRU 100 VOLTS**



SOD-123F CASE

MARKING CODES:

DEVICE	MARKING CODE
CMMSH1-20	CS20F
CMMSH1-40	CS40F
CMMSH1-60	CS60F
CMMSH1-100	CS100F

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

	SYMBOL	CMMSH1 -20	CMMSH1 -40	CMMSH1 -60	CMMSH1 -100	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	20	40	60	100	V
DC Blocking Voltage	V_R	20	40	60	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	28	42	70	V
Average Forward Current ($T_L=75^\circ\text{C}$)	I_O			1.0		A
Peak Forward Surge Current (8.3ms)	I_{FSM}			30		A
Power Dissipation (Note 1)	P_D			1.42		W
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JA}			88		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$		0.50	mA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$		10	mA
V_F	$I_F=1.0\text{A (CMMSH1-20)}$		0.45	V
V_F	$I_F=1.0\text{A (CMMSH1-40)}$		0.55	V
V_F	$I_F=1.0\text{A (CMMSH1-60)}$		0.70	V
V_F	$I_F=1.0\text{A (CMMSH1-100)}$		0.85	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz (CMMSH1-20)}$	100		pF
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz (CMMSH1-40)}$	80		pF
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz (CMMSH1-60)}$	50		pF
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz (CMMSH1-100)}$	30		pF

Notes: (1) FR-4 Epoxy PC Board with Copper Mounting Pad Area of 2.9mm²

CentralTM
Semiconductor Corp.

DESCRIPTION:

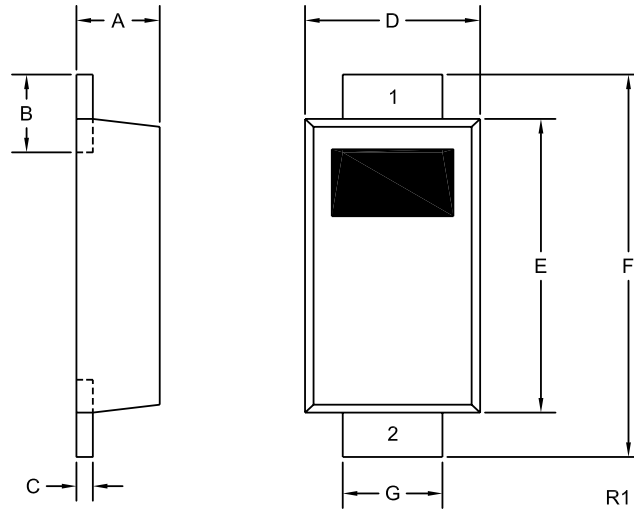
The Central Semiconductor CMMSH1 Series are high current Schottky rectifiers in the SOD-123F surface mount package. These devices are suitable for design applications such as ac/dc, dc/dc converters, and reverse battery protection circuits in a variety of portable and battery powered products.

FEATURES:

- Small size (58% smaller than the SMA package)
- 67% lower profile than SMA
- Greatly improved power dissipation per board area as compared to the SMA
- Low Forward Voltage
- High Current
- Thermally efficient Flat Lead package design.

R2 (25-October 2005)

SOD-123F CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.035	0.043	0.88	1.08
B	0.020	0.031	0.50	0.80
C	0.004	0.008	0.10	0.20
D	0.065	0.077	1.65	1.95
E	0.104	0.116	2.65	2.95
F	0.140	0.156	3.55	3.95
G	0.030	0.041	0.75	1.05

SOD-123F (REV:R1)

LEAD CODE:

- 1) CATHODE
- 2) ANODE

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