

PRELIMINARY

**CMMSH1-40**

**SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIER  
1.0 AMP, 40 VOLTS**

**SOD-123F CASE****MARKING CODE: C14**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The Central Semiconductor CMMSH1-40 is a high current Schottky rectifier in a SOD-123F surface mount package 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.

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

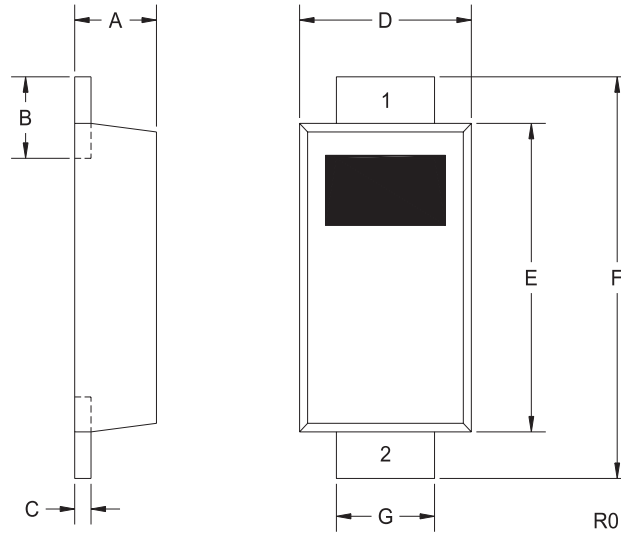
	<b>SYMBOL</b>		<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
DC Blocking Voltage	$V_R$	40	V
Average Forward Current ( $T_L=110^\circ\text{C}$ )	$I_O$	1.0	A
Peak Forward Surge Current (8.3ms)	$I_{FSM}$	20	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=20\text{V}$	150	$\mu\text{A}$
$I_R$	$V_R=40\text{V}$	500	$\mu\text{A}$
$V_F$	$I_F=100\text{mA}$	0.36	V
$V_F$	$I_F=1.0\text{A}$	0.50	V
$V_F$	$I_F=3.0\text{A}$	0.80	V

R0 (29-January 2004)

SOD-123F CASE - MECHANICAL OUTLINE



**LEAD CODE:**  
1) CATHODE  
2) ANODE

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.028	0.031	0.72	0.78
B	0.028		0.70	
C	0.004	0.008	0.10	0.20
D	0.059	0.067	1.50	1.70
E	0.102	0.110	2.60	2.80
F	0.134	0.142	3.40	3.60
G	0.034	0.037	0.87	0.93

SOD-123F (REV:R0)

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R0 (29-January 2004)