

CMMR1S-02

**SURFACE MOUNT  
SUPER FAST RECOVERY  
SILICON RECTIFIER  
1.0 AMP, 200 VOLTS**



**SOD-123F CASE**

**MARKING CODE:** CSF02F

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMMR1S-02 is a 1.0 Amp Silicon Super Fast Recovery Rectifier in the SOD-123F surface mount package. This high quality, well constructed, highly reliable device is designed for use in all types of commercial, industrial, entertainment, computer and automotive applications.

**FEATURES:**

- Small size (58% smaller than the SMA package)
- 67% lower profile than SMA
- Greatly improved power dissipation per board area 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)

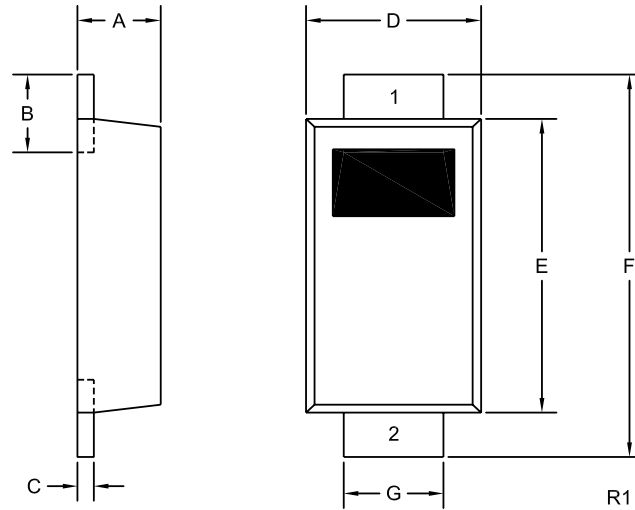
	<b>SYMBOL</b>		<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	V
DC Blocking Voltage	$V_R$	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	V
Average Forward Current ( $T_L=110^\circ\text{C}$ )	$I_O$	1.0	A
Peak Forward Surge Current (8.3ms)	$I_{FSM}$	30	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	180	$^\circ\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=200\text{V}$		10	$\mu\text{A}$
$I_R$	$V_R=200\text{V}, T_A=100^\circ\text{C}$		50	$\mu\text{A}$
$V_F$	$I_F=1.0\text{A}$		0.95	V
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Recover to } 0.25\text{A}$		35	ns
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	4.0		pF

R1 (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

**MARKING CODE:** CSF02F