

CMMR1S-02

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



SOD-123F CASE

MARKING CODE: CSF02F

CentralTM
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)

	SYMBOL		UNITS
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	θ_{JA}	180	$^{\circ}\text{C/W}$

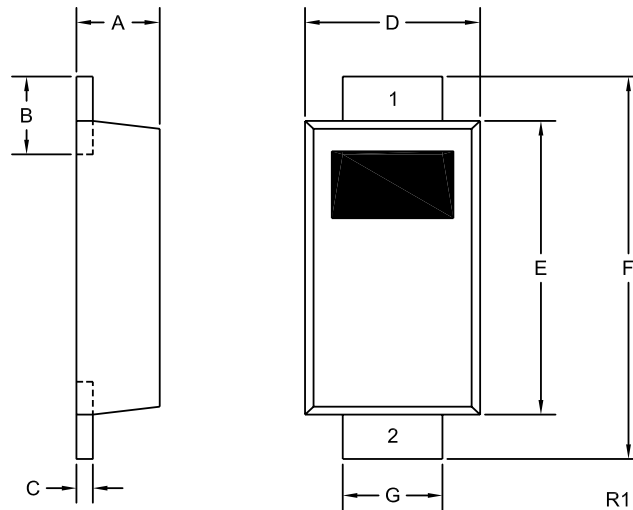
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

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

R1 (25-October 2005)

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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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