

CMMR1F-02  
CMMR1F-04  
CMMR1F-06

**SURFACE MOUNT  
FAST RECOVERY SILICON RECTIFIER  
1 AMP, 200 THRU 600 VOLTS**



**SOD-123F CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMMR1F Series are high quality 1.0 Amp Surface Mount Silicon Rectifiers, well constructed, highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications. The SOD-123F case occupies 58% less board space than the SMA, with a 67% lower profile.

**MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE**

**FEATURES:**

- Flat lead design and clip assembly allow for a larger die size and improved thermal efficiency
- Superior lot to lot consistency
- Low cost
- High reliability

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

	SYMBOL	CMMR1F-02	CMMR1F-04	CMMR1F-06	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	V
DC Blocking Voltage	$V_R$	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	V
Average Forward Current ( $T_L=75^\circ\text{C}$ )	$I_O$		1.0		A
Peak Forward Surge Current (8.3ms)	$I_{FSM}$		16.5		A
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$		30		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$		10	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=125^\circ\text{C}$		50	$\mu\text{A}$
$V_F$	$I_F=1.0\text{A}$		1.3	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	9.0		pF
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Rec. to } 0.25\text{A (CMMR1F-02, 04)}$		150	ns
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Rec. to } 0.25\text{A (CMMR1F-06)}$		250	ns

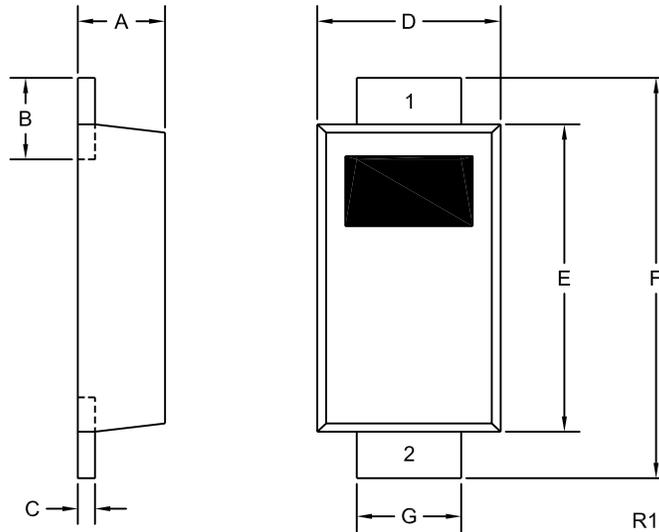
R2 (25-January 2010)

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**SOD-123F CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMMR1F-02	CF02F
CMMR1F-04	CF04F
CMMR1F-06	CF06F

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

R2 (25-January 2010)

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