

**CMMR1 SERIES**  
**SURFACE MOUNT**  
**GENERAL PURPOSE**  
**SILICON RECTIFIER**  
**1 AMP, 200 THRU 1000 VOLTS**

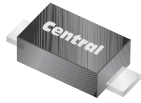


[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMMR1 Series of High Current Density Rectifiers, in a SOD-123F surface mount package are designed for all types of commercial, industrial computer and automotive applications.

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



**SOD-123F CASE**

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

	SYMBOL	CMMR1-02	CMMR1-04	CMMR1-06	CMMR1-10	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	1000	V
DC Blocking Voltage	$V_R$	200	400	600	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	700	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
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +150			$^\circ\text{C}$
Thermal resistance (Note 1)	$\theta_{JA}$		180			$^\circ\text{C/W}$
Thermal resistance (Note 2)	$\theta_{JA}$		65			$^\circ\text{C/W}$

**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	$\mu\text{A}$
$V_F$	$I_F=1.0\text{A}$		1.1	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	4.0		pF

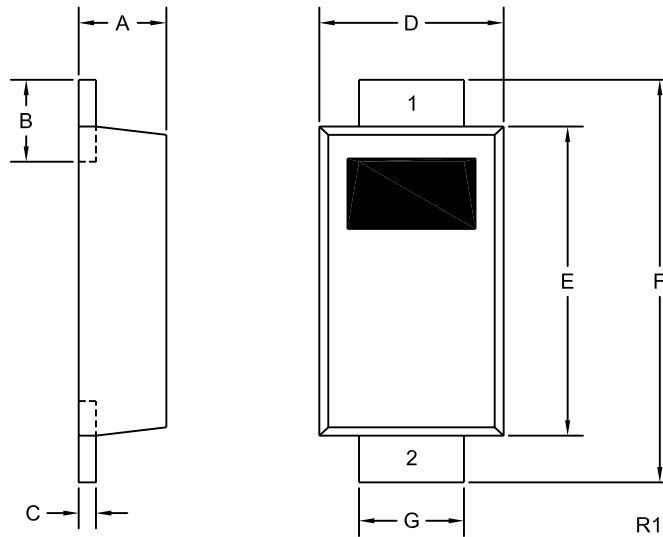
Notes: (1) FR-4 Epoxy PCB with copper mounting pad area of  $2.2\text{mm}^2$   
(2) FR-4 Epoxy PCB with copper mounting pad area of  $36\text{mm}^2$

R2 (3-May 2010)

**CMMR1 SERIES**  
**SURFACE MOUNT**  
**GENERAL PURPOSE**  
**SILICON RECTIFIER**  
**1 AMP, 200 THRU 1000 VOLTS**



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



DEVICE	MARKING CODE
CMMR1-02	C02F
CMMR1-04	C04F
CMMR1-06	C06F
CMMR1-10	C10F

SYMBOL	DIMENSIONS			
	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 (3-May 2010)

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