

CMMR1 SERIES

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

**SOD-123F CASE**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**

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)	θ_{JA}		180			$^{\circ}\text{C/W}$
Thermal resistance (Note 2)	θ_{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	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=125^{\circ}\text{C}$		50	μA
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

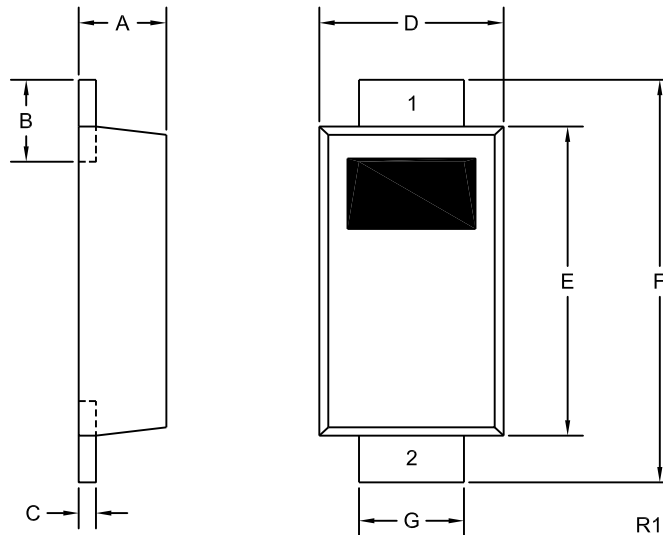
Notes: (1) FR-4 Epoxy PCB with copper mounting pad area of 2.2mm^2
(2) FR-4 Epoxy PCB with copper mounting pad area of 36mm^2

R2 (3-May 2010)

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SOD-123F CASE - MECHANICAL OUTLINE



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

LEAD CODE:

- 1) Cathode
- 2) Anode

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)

R2 (3-May 2010)