#### **CMMR1 SERIES**

SURFACE MOUNT SILICON GENERAL PURPOSE RECTIFIERS 1 AMP, 200 THRU 1000 VOLT



www.centralsemi.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

 $\textbf{MAXIMUM RATINGS:} \ (T_{\mbox{\scriptsize A}} = 25 \ ^{\circ}\mbox{C unless otherwise noted})$ 

	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 <sub>R(RMS)</sub>	140	280	420	700	V
Average Forward Current (T <sub>L</sub> =75°C)	ĺο		1.	0		Α
Peak Forward Surge Current (8.3ms)	I <sub>FSM</sub>		3	0		Α
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65 to	+150		°C
Thermal resistance (Note 1)	$\Theta_{\sf JA}$		18	80		°C/W
Thermal resistance (Note 2)	$\Theta_{LA}$		6	5		°C/W

# **ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_{R}$	$V_R$ =Rated $V_{RRM}$		10	μΑ
$I_R$	$V_R$ =Rated $V_{RRM}$ , $T_A$ =125°C		50	μΑ
$V_{F}$	I <sub>F</sub> =1.0A		1.1	V
CJ	V <sub>R</sub> =4.0V, f=1.0MHz	6.0		pF

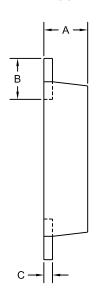
Notes: (1) FR-4 Epoxy PCB with copper mounting pad area of  $2.2 \text{mm}^2$  (2) FR-4 Epoxy PCB with copper mounting pad area of  $36 \text{mm}^2$ 

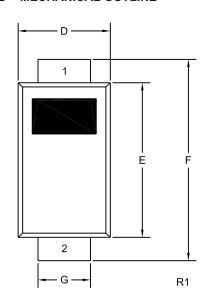
# **CMMR1 SERIES**

### SURFACE MOUNT SILICON **GENERAL PURPOSE RECTIFIERS** 1 AMP, 200 THRU 1000 VOLT



# SOD-123F CASE - MECHANICAL OUTLINE





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

DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
Α	0.035	0.043	0.88	1.08	
В	0.020	0.031	0.50	0.80	
С	0.004	0.008	0.10	0.20	
D	0.065	0.077	1.65	1.95	
Е	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

#### **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



#### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

#### **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

#### REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### **CONTACT US**

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor:

CMMR1-06 TR CMMR1-10 TR CMMR1-02 TR CMMR1-04 TR