

CMR3S-01 CMR3S-04
CMR3S-02 CMR3S-06

**SURFACE MOUNT SILICON
SUPER FAST
RECOVERY RECTIFIERS
3.0 AMP, 100 THRU 600 VOLT**



SMC CASE



www.centra-semi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR3S-01 series 3.0 Amp surface mount silicon Super Fast Recovery rectifiers are highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications. To order devices on 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

- Super fast recovery (35ns MAX)
- High reliability
- Glass passivated chip
- Special selections available
- "C" bend construction provides strain relief when mounted on PC board

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

	SYMBOL	CMR3S-01	CMR3S-02	CMR3S-04	CMR3S-06	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	V
DC Blocking Voltage	V_R	100	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	V
Average Forward Current ($T_L=75^{\circ}\text{C}$)	I_O		3.0			A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}		100			A
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 to +150			$^{\circ}\text{C}$
Thermal Resistance	θ_{JL}		16			$^{\circ}\text{C/W}$

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

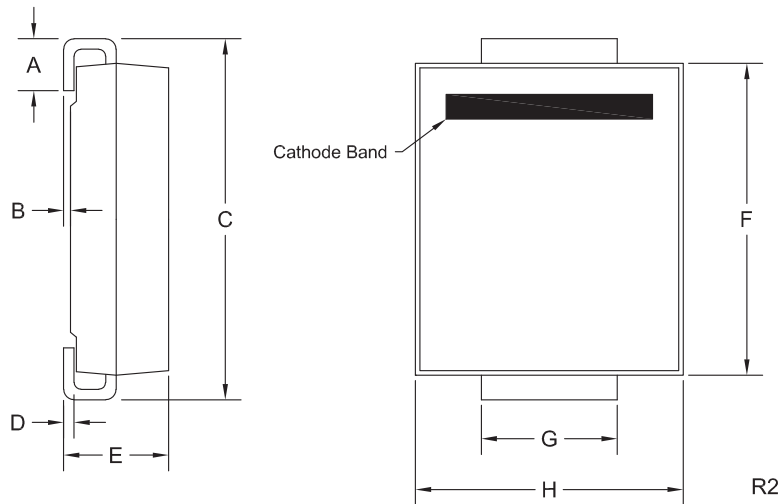
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$		1.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^{\circ}\text{C}$		200	μA
V_F	$I_F=3.0\text{A}$ (CMR3S-01, CMR3S-02)		0.95	V
V_F	$I_F=3.0\text{A}$ (CMR3S-04)		1.25	V
V_F	$I_F=3.0\text{A}$ (CMR3S-06)		1.70	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$		35	ns
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	45		pF

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SMC CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMR3S-01	CS301
CMR3S-02	CS302
CMR3S-04	CS304
CMR3S-06	CS306

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.002	0.008	0.05	0.20
C	0.305	0.320	7.75	8.13
D	0.006	0.012	0.15	0.31
E	0.079	0.103	2.00	2.62
F	0.260	0.280	6.60	7.11
G	0.108	0.128	2.75	3.25
H	0.220	0.245	5.59	6.22

SMC (REV: R2)

R3 (11-September 2013)

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 quick ship samples (2nd 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

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