

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

**SURFACE MOUNT
 SUPER FAST RECOVERY
 SILICON RECTIFIER
 3 AMP, 100 THRU 600 VOLTS**



SMC CASE

• Device is **Halogen Free** by Design



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR3S-01 Series 3.0 Amp Surface Mount Silicon Super Fast Recovery Rectifier is a high quality, well constructed, highly reliable component 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
- Superior lot to lot consistency
- "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

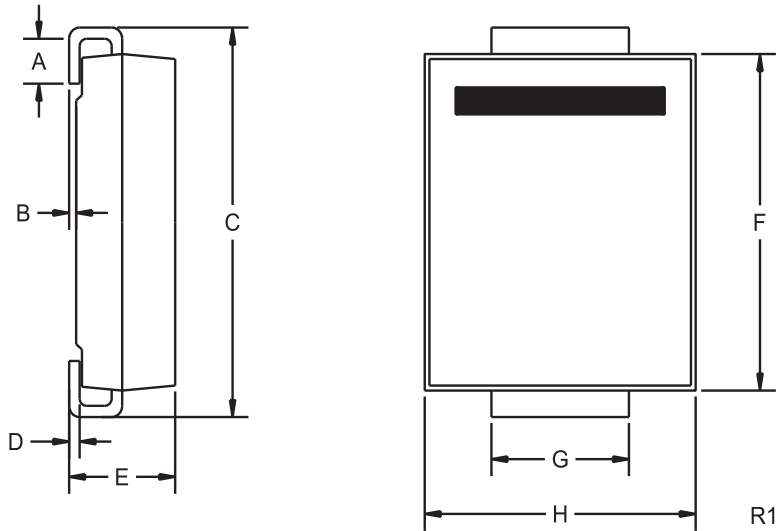
R2 (3-February 2010)

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



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SMC CASE - MECHANICAL OUTLINE



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

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.004	0.008	0.10	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	0.124	2.75	3.15
H	0.220	0.245	5.59	6.22

SMC (REV: R1)

R2 (3-February 2010)