CMR3S-01 CMR3S-04 CMR3S-06

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



• Device is Halogen Free by Design

FEATURES:

- Super fast recovery (35ns MAX)
- · High reliability
- · Glass passivated chip
- Special selections available

Central Semiconductor Corp.

www.centralsemi.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

- · Superior lot to lot consistency
- "C" bend construction provides strain relief when mounted on pc board

MAXIMUM RATINGS: (T_A=25°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°C)	IO	3.0				Α
Peak Forward Surge Current, tp=8.3ms	IFSM	100				Α
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150				°C
Thermal Resistance	Θ_{JL}		1	6		°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_{R}	V _R =Rated V _{RRM}		1.0	μΑ
I_{R}	V _R =Rated V _{RRM} , T _A =100°C		200	μΑ
V_{F}	I _F =3.0A (CMR3S-01, CMR3S-02)		0.95	V
٧F	I _F =3.0A (CMR3S-04)		1.25	V
٧F	I _F =3.0A (CMR3S-06)		1.70	V
t _{rr}	I_F =0.5A , I_R =1.0A, I_{rr} =0.25A		35	ns
CJ	V _R =4.0V, f=1.0MHz	45		pF

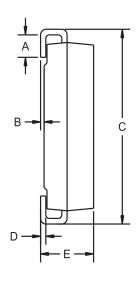
R2 (3-February 2010)

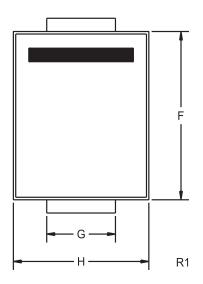
CMR3S-01 CMR3S-04 CMR3S-02 CMR3S-06

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SMC CASE - MECHANICAL OUTLINE





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

DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
Α	0.030	0.060	0.76	1.52	
В	0.004	0.008	0.10	0.20	
С	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	
Н	0.220	0.245	5.59	6.22	

SMC (REV: R1)