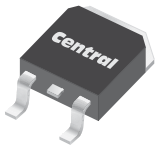
MCR716
MCR718

SURFACE MOUNT
SILICON CONTROLLED RECTIFIER
4 AMP, 400 THRU 600 VOLTS



DPAK THYRISTOR CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MCR716 and MCR718 are epoxy molded Silicon Controlled Rectifiers designed for sensing circuit applications and control systems.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C unless otherwise noted)

	SYMBOL	MCR716	MCR718	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	400	600	V
RMS On-State Current (T_C=85°C)	$I_{T(RMS)}$	4.0		A
Peak non-Repetitive Surge Current				
(1/2 cycle Sine wave, 50Hz/60Hz)	I_{TSM}	15		A
I^2t Value for Fusing, t=10ms	I^2t	1.1		A^2s
Peak Gate Power, tp=1.0μs	P_{GM}	0.5		W
Average Gate Power Dissipation	$P_{G(AV)}$	0.1		W
Peak Gate Current, tp=1.0μs	I_{GM}	0.2		A
Critical Rate of Rise of On-State Current	di/dt	50		A/μs
Storage Temperature	T_{stg}	-40 to +150		°C
Junction Temperature	T_J	-40 to +125		°C

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

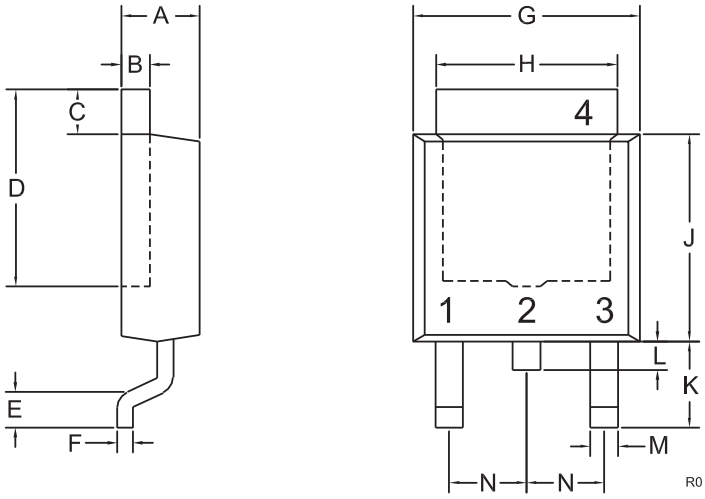
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}, R_{GK}=1.0KΩ			10	μA
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}, R_{GK}=1.0KΩ, T_C=125°C			200	μA
I_{GT}	V_D=12V, R_L=10Ω	1.0	38	75	μA
I_H	I_T=50mA, R_{GK}=1.0KΩ		0.25	2.0	mA
V_{GT}	V_D=12V, R_L=10Ω		0.55	0.8	V
V_{TM}	I_{TM}=8.0A, tp=380μs		1.6	1.8	V
dv/dt	V_D=$^2/_3$ V_{DRM}, R_{GK}=1.0KΩ, T_C=125°C	10			V/μs

R1 (1-March 2010)

MCR716
MCR718

SURFACE MOUNT
SILICON CONTROLLED RECTIFIER
4 AMP, 400 THRU 600 VOLTS

DPAK THYRISTOR CASE - MECHANICAL OUTLINE



LEAD CODE:
1) Cathode
2) Anode
3) Gate
4) Anode

MARKING:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.086	0.094	2.18	2.39
B	0.018	0.032	0.46	0.81
C	0.035	0.050	0.89	1.27
D	0.205	0.228	5.21	5.79
E	0.047	0.055	1.20	1.40
F	0.018	0.024	0.45	0.60
G	0.250	0.268	6.35	6.81
H	0.205	0.215	5.20	5.46
J	0.235	0.245	5.97	6.22
K	0.100	0.108	2.55	2.74
L	0.025	0.040	0.64	1.02
M	0.025	0.035	0.64	0.89
N	0.090		2.28	

DPAK THYRISTOR (REV: R0)