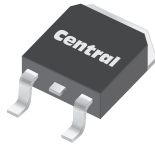


MCR716
MCR718

**SURFACE MOUNT
SILICON CONTROLLED RECTIFIERS
4.0 AMP, 400 THRU 600 VOLT**



DPAK CASE



www.centralemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MCR716 and MCR718 are epoxy molded SCRs designed for sensing circuit and control system applications.

MARKING: FULL PART NUMBER

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

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

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

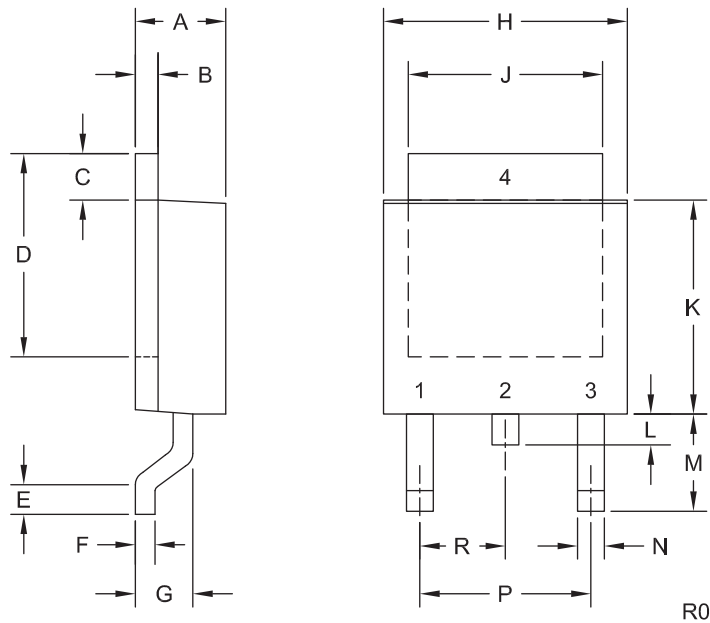
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}, I_{RRM}	Rated $V_{DRM}, V_{RRM}, R_{GK}=1.0\text{K}\Omega$			10	μA
I_{DRM}, I_{RRM}	Rated $V_{DRM}, V_{RRM}, R_{GK}=1.0\text{K}\Omega, T_C=125^\circ\text{C}$			200	μA
I_{GT}	$V_D=12\text{V}, R_L=10\Omega$	1.0	38	75	μA
I_H	$I_T=50\text{mA}, R_{GK}=1.0\text{K}\Omega$		0.25	2.0	mA
V_{GT}	$V_D=12\text{V}, R_L=10\Omega$		0.55	0.8	V
V_{TM}	$I_{TM}=8.0\text{A}, t_p=380\mu\text{s}$		1.6	1.8	V
dv/dt	$V_D=2/3 V_{DRM}, R_{GK}=1.0\text{K}\Omega, T_C=125^\circ\text{C}$	10			$\text{V}/\mu\text{s}$

MCR716
MCR718

**SURFACE MOUNT
SILICON CONTROLLED RECTIFIERS
4.0 AMP, 400 THRU 600 VOLT**



DPAK CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode
- 3) Gate
- 4) Anode

MARKING:

FULL PART NUMBER

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.032	0.40	0.81
C	0.035	0.063	0.89	1.60
D	0.203	0.228	5.15	5.79
E	0.020	-	0.51	-
F	0.018	0.024	0.45	0.60
G	0.051	0.071	1.30	1.80
H	0.248	0.268	6.30	6.81
J	0.197	0.217	5.00	5.50
K	0.209	0.245	5.30	6.22
L	0.025	0.040	0.64	1.02
M	0.090	0.115	2.30	2.91
N	0.012	0.045	0.30	1.14
P	0.180		4.60	
R	0.090		2.30	

DPAK (REV: R0)

R2 (21-January 2013)