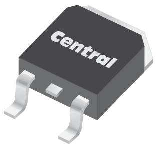
CQD-4M
CQD-4N

SURFACE MOUNT
4 AMP SILICON TRIAC
600 THRU 800 VOLTS



DPAK THYRISTOR CASE

Central™
Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CQD-4M series type is an Epoxy Molded Silicon Triac designed for full wave AC control applications featuring gate triggering in all four (4) quadrants.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C unless otherwise noted)	**SYMBOL**	**CQD-4M**	**CQD-4N**	**UNITS**
Peak Repetitive Off-State Voltage	V_{DRM}	600	800	V
RMS On-State Current (T_C=80°C)	$I_{T(RMS)}$	4.0		A
Peak One Cycle Surge, t=10ms	I_{TSM}	40		A
I^2t Value for Fusing, t=10ms	I^2t	2.4		A^2s
Peak Gate Power, tp=10μs	P_{GM}	3.0		W
Average Gate Power Dissipation	$P_{G(AV)}$	0.2		W
Peak Gate Current, tp=10μs	I_{GM}	1.2		A
Operating Junction Temperature	T_J	-40 to +125		°C
Storage Temperature	T_{stg}	-40 to +150		°C

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

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_{DRM}	Rated V_{DRM}, R_{GK}=1KΩ			10	μA
I_{DRM}	Rated V_{DRM}, R_{GK}=1KΩ, T_C=125°C			200	μA
I_{GT}	V_D=12V, QUAD I, II, III		2.5	5.0	mA
I_{GT}	V_D=12V, QUAD IV		5.4	9.0	mA
I_H	R_{GK}=1KΩ		1.6	5.0	mA
V_{GT}	V_D=12V, QUAD I, II, III, IV		0.95	1.75	V
V_{TM}	I_{TM}=6.0A, tp=380μs		1.25	1.75	V
dv/dt	$V_D={}^2/_3\ V_{DRM}$, T_C=125°C	11			V/μs

R1 (12-February 2010)

CQD-4M
CQD-4N

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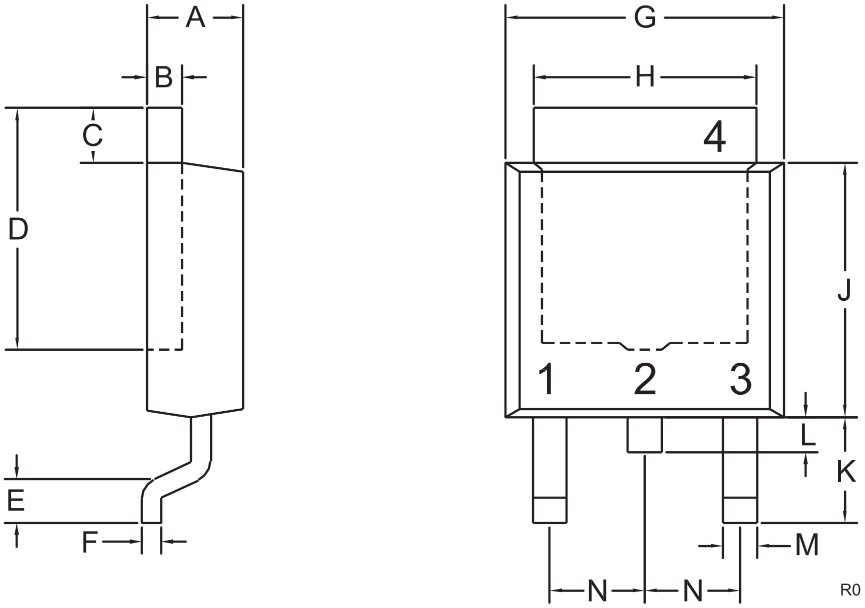
DPAK THYRISTOR CASE - MECHANICAL OUTLINE



LEAD CODE:
1) MT1
2) MT2
3) Gate
4) MT2

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)

R1 (12-February 2010)