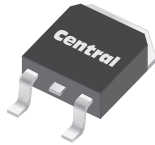


CQD-4M
CQD-4N

SURFACE MOUNT SILICON
TRIACS
4.0 AMP, 600 THRU 800 VOLT



DPAK CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CQD-4M and CQD-4N are epoxy molded silicon TRIACs designed for full wave AC control applications featuring gate triggering in all four quadrants.

MARKING: FULL PART NUMBER

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

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

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

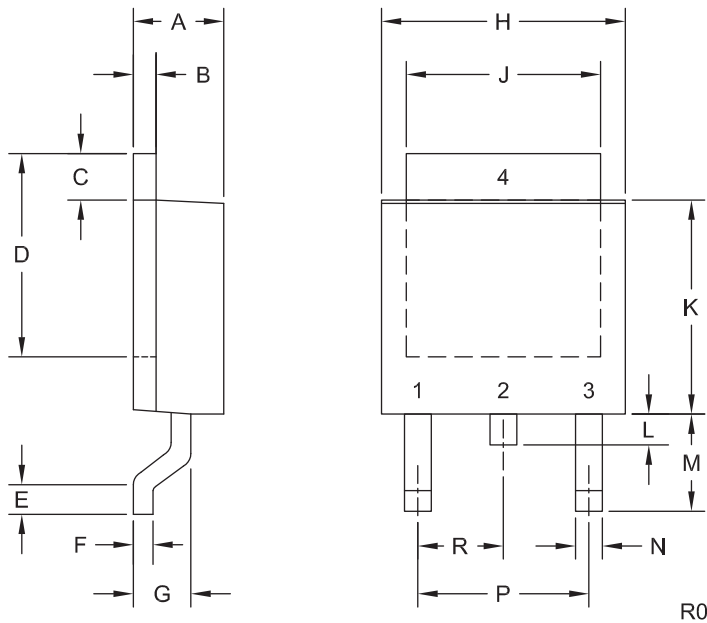
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}	Rated V_{DRM} , $R_{GK}=1\text{K}\Omega$			10	μA
I_{DRM}	Rated V_{DRM} , $R_{GK}=1\text{K}\Omega$, $T_C=125^\circ\text{C}$			200	μA
I_{GT}	$V_D=12\text{V}$, QUAD I, II, III		2.5	5.0	mA
I_{GT}	$V_D=12\text{V}$, QUAD IV		5.4	9.0	mA
I_H	$R_{GK}=1\text{K}\Omega$		1.6	5.0	mA
V_{GT}	$V_D=12\text{V}$, QUAD I, II, III, IV		0.95	1.75	V
V_{TM}	$I_{TM}=6.0\text{A}$, $t_p=380\mu\text{s}$		1.25	1.75	V
dv/dt	$V_D=2/3 V_{DRM}$, $T_C=125^\circ\text{C}$	11			$\text{V}/\mu\text{s}$

CQD-4M
CQD-4N

SURFACE MOUNT SILICON
TRIACS
4.0 AMP, 600 THRU 800 VOLT



DPAK CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) MT1
- 2) MT2
- 3) Gate
- 4) MT2

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)