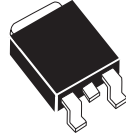


CQD-4M
CQD-4N

4.0 AMP TRIAC
600 THRU 800 VOLTS



DPAK THYRISTOR CASE

CentralTM

Semiconductor Corp.

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 CODE: FULL PART NUMBER

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

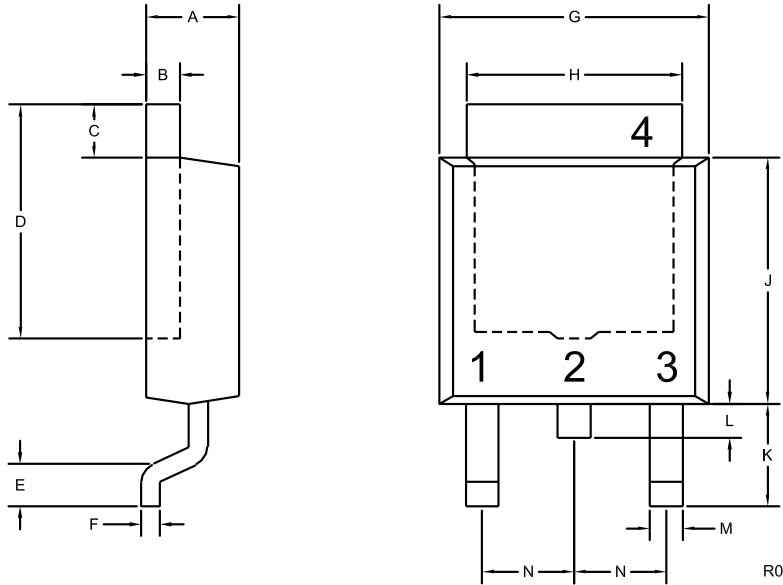
	SYMBOL	CQD -4M	CQD -4N	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}	600	800	V
RMS On-State Current ($T_C=80^\circ\text{C}$)	$I_T(\text{RMS})$		4.0	A
Peak One Cycle Surge ($t=10\text{ms}$)	I_{TSM}		40	A
I^2t Value for Fusing ($t=10\text{ms}$)	I^2t		2.4	A ² s
Peak Gate Power ($t_p=10\mu\text{s}$)	P_{GM}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

R0 (20-May 2004)

DPAK THYRISTOR CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE:

FULL PART NUMBER

SYMBOL	DIMENSIONS		DIMENSIONS	
	INCHES		MILLIMETERS	
	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)