

CQ202-4B-2
 CQ202-4D-2
 CQ202-4M-2
 CQ202-4N-2

4.0 AMP TRIAC
 200 THRU 800 VOLTS



TO-202-2 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CQ202-4B-2 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	CQ202 -4B-2	CQ202 -4D-2	CQ202 -4M-2	CQ202 -4N-2	UNITS
Peak Repetitive Off-State Voltage	V _{DRM}	200	400	600	800	V
RMS On-State Current (T _C =80°C)	I _{T(RMS)}			4.0		A
Peak Non-Repetitive Surge Current (t=8.3ms)	I _{TSM}			40		A
Peak Non-Repetitive Surge Current (t=10ms)	I _{TSM}			35		A
I ² t Value for Fusing (t=10ms)	I ² t			6.0		A ² s
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
Storage Temperature	T _{stg}		-40 to +150			°C
Junction Temperature	T _J		-40 to +125			°C
Thermal Resistance	θ _{JA}		60			°C/W
Thermal Resistance	θ _{JC}		7.5			°C/W

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

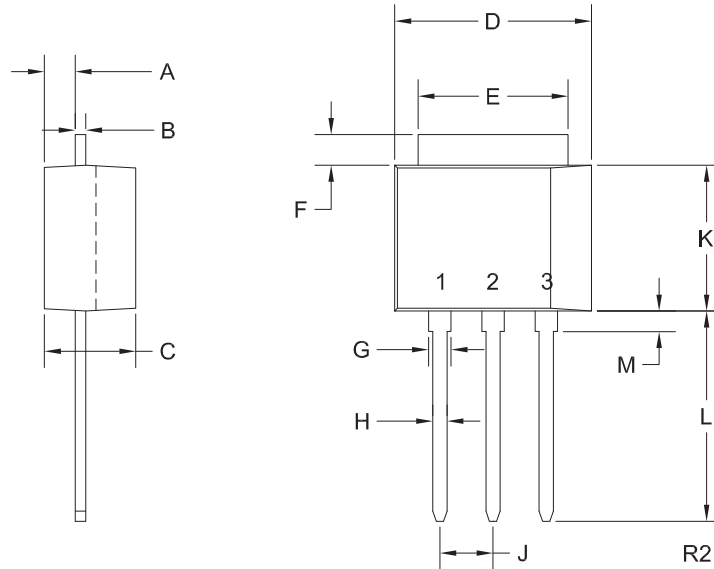
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{DRM}	Rated V _{DRM} , R _{GK} =1.0KΩ			10	µA
I _{DRM}	Rated V _{DRM} , R _{GK} =1.0KΩ, T _C =125°C			200	µA
I _{GT}	V _D =12V, QUAD I, II, III		6.6	20	mA
I _{GT}	V _D =12V, QUAD IV		35	50	mA
I _H	R _{GK} =1.0KΩ		5.2	25	mA
V _{GT}	V _D =12V, QUAD I, II, III		1.1	1.5	V
V _{GT}	V _D =12V, QUAD IV		2.0	2.5	V
V _{TM}	I _{TM} =6.0A, tp=380µs		1.25	1.6	V
dv/dt	V _D =2/3 V _{DRM} , T _C =125°C	5.0			V/µs

CQ202-4B-2
 CQ202-4D-2
 CQ202-4M-2
 CQ202-4N-2

4.0 AMP TRIAC
 200 THRU 800 VOLTS



TO-202-2 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
 - 2) Anode
 - 3) Gate
- Tab is common to pin 2

MARKING:

FULL PART NUMBER

SYMBOL	DIMENSIONS		DIMENSIONS	
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.016	0.024	0.40	0.60
C	0.173	0.181	4.40	4.60
D	0.374	0.413	9.50	10.5
E	0.236	0.355	6.00	9.00
F	-	0.071	-	1.80
G	0.035	0.055	0.90	1.40
H	0.023	0.031	0.59	0.80
J	0.094	0.106	2.39	2.69
K	0.280	0.346	7.12	8.80
L	0.406	0.531	10.3	13.5
M	0.024	0.059	0.60	1.50

TO-202-2 (REV: R2)

R2 (23-April 2012)