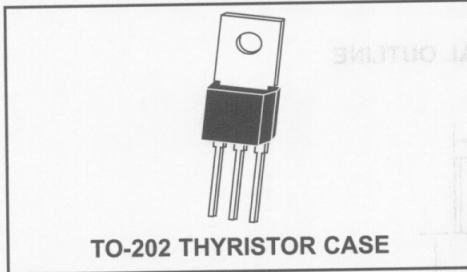


CQ202-4B  
CQ202-4D  
CQ202-4M  
CQ202-4N  
**4.0 AMP TRIAC  
200 THRU 800 VOLTS**



### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CQ202-4B 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	CQ202 -4B	CQ202 -4D	CQ202 -4M	CQ202 -4N	UNITS
Peak Repetitive Off-State Voltage	$V_{DRM}$	200	400	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		$\text{A}^2\text{s}$
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
Storage Temperature	$T_{stg}$			-40 to +150		$^\circ\text{C}$
Junction Temperature	$T_J$			-40 to +125		$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$			60		$^\circ\text{C}/\text{W}$
Thermal Resistance	$\theta_{JC}$			7.5		$^\circ\text{C}/\text{W}$

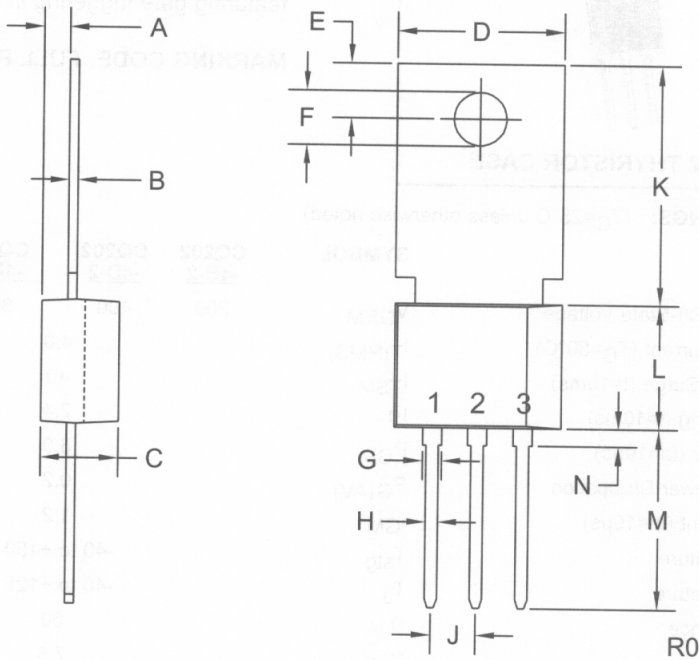
**ELECTRICAL CHARACTERISTICS:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{DRM}$	Rated $V_{DRM}$ , $R_{GK}=1\text{K}\Omega$			10	$\mu\text{A}$
$I_{DRM}$	Rated $V_{DRM}$ , $R_{GK}=1\text{K}\Omega$ , $T_C=125^\circ\text{C}$			200	$\mu\text{A}$
$I_{GT}$	$V_D=12\text{V}$ , QUAD I, II, III		6.6	20	$\text{mA}$
$I_{GT}$	$V_D=12\text{V}$ , QUAD IV		35	50	$\text{mA}$
$I_H$	$R_{GK}=1\text{K}\Omega$		5.2	25	$\text{mA}$
$V_{GT}$	$V_D=12\text{V}$ , QUAD I, II, III		1.1	1.5	V
$V_{GT}$	$V_D=12\text{V}$ , QUAD IV		2.0	2.5	V
$V_{TM}$	$I_{TM}=6.0\text{A}$ , $t_p=380\mu\text{s}$		1.25	1.60	V
dv/dt	$V_D=2/3 V_{DRM}$ , $T_C=125^\circ\text{C}$	5.0			$\text{V}/\mu\text{s}$

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

4.0 AMP TRIAC  
200 THRU 800 VOLTS

**TO-202 THYRISTOR CASE - MECHANICAL OUTLINE**



DATA SHEETS

**LEAD CODE:**

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

NOTE: TAB IS COMMON  
TO PIN 2 (MT2)

**MARKING CODE:**  
**FULL PART NUMBER**

SYMBOL	DIMENSIONS		DIMENSIONS	
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.057	0.061	1.45	1.55
B	0.019	0.021	0.49	0.52
C	0.175	0.180	4.44	4.56
D	0.376	0.388	9.55	9.85
E	0.118	0.134	3.00	3.40
F (DIA)	0.124	0.126	3.15	3.20
G	0.035	0.043	0.90	1.10
H	0.023	0.028	0.59	0.71
J	0.098	0.102	2.49	2.59
K	0.459	0.559	11.66	14.21
L	0.280	0.301	7.12	7.65
M	0.406	0.425	10.30	10.80
N	0.024	0.059	0.60	1.50

TO-202 Thyristor (REV: R0)