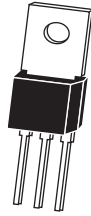


查询"CQ202-4DS"供应商

CQ202-4BS  
CQ202-4DS  
CQ202-4MS  
CQ202-4NS  
  
4.0 AMP TRIAC  
200 THRU 800 VOLTS



TO-202 THYRISTOR CASE

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CQ202-4BS 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)

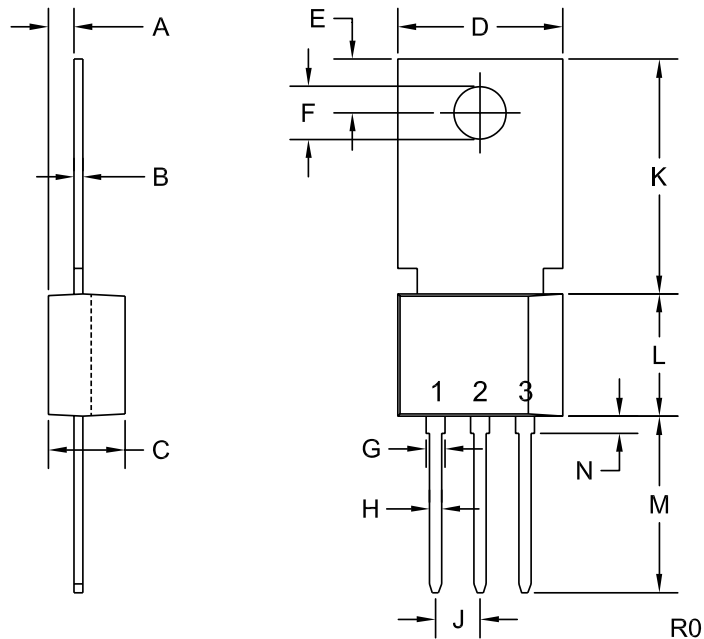
|                                                        | SYMBOL        | CQ202<br>-4BS | CQ202<br>-4DS | CQ202<br>-4MS | CQ202<br>-4NS | UNITS                |
|--------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|----------------------|
| Peak Repetitive Off-State Voltage                      | $V_{DRM}$     | 200           | 400           | 600           | 800           | V                    |
| RMS On-State Current ( $T_C=80^\circ\text{C}$ )        | $I_{T(RMS)}$  |               | 4.0           |               |               | A                    |
| Peak Non-Repetitive Surge Current ( $t=8.3\text{ms}$ ) | $I_{TSM}$     |               | 40            |               |               | A                    |
| Peak Non-Repetitive Surge Current ( $t=10\text{ms}$ )  | $I_{TSM}$     |               | 35            |               |               | A                    |
| $I^2t$ Value for Fusing ( $t=10\text{ms}$ )            | $I^2t$        |               | 6.0           |               |               | $\text{A}^2\text{s}$ |
| 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            |               |               | $^\circ\text{C/W}$   |
| Thermal Resistance                                     | $\theta_{JC}$ |               | 7.5           |               |               | $^\circ\text{C/W}$   |

**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                                   |     | 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  |      |      | $\text{V}/\mu\text{s}$ |

R5 (27-June 2005)

TO-202 THYRISTOR CASE - MECHANICAL OUTLINE



LEAD CODE:

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

NOTE: TAB IS COMMON  
TO PIN 2 (MT2)

MARKING CODE:

FULL PART NUMBER

| DIMENSIONS |        |       |             |       |
|------------|--------|-------|-------------|-------|
| SYMBOL     | 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)