

## KYOCERA Corporation Corporate Electronic Components Group RF Devices Division

Quartz Crystal"CX1612DB series"

KYOCERA Part Number: CX1612DB4000DD0WLLCC

Note: This is a preliminary specification.

If you would like to know official specification and details specification, please contact us.

| 1.RATINGS                   |       |            |            |        |  |  |  |  |  |  |
|-----------------------------|-------|------------|------------|--------|--|--|--|--|--|--|
| Items                       | SYMB. | Rating     | Unit       | Rmarks |  |  |  |  |  |  |
| Operating Temperature Range | Topr  | -30 to +85 | $^{\circ}$ |        |  |  |  |  |  |  |
| Storage Temperature Range   | Topr  | -40 to +85 | $^{\circ}$ |        |  |  |  |  |  |  |

| 2.Electrical Characteristics          |                          |             |      |       |      |                      |  |  |  |  |
|---------------------------------------|--------------------------|-------------|------|-------|------|----------------------|--|--|--|--|
| Item                                  | Electrical Specification |             |      |       |      | Test Conditions      | Remarks  |  |  |  |
|                                       | SYMB.                    | Min.        | Тур. | Max.  | Unit | ]                    |  |  |  |  |
| Mode of Vibration                     |                          | Fundamental |      |       |      |                      |  |  |  |  |
| Nominal FrequencyF0                   | F0                       |             | 40   |       | MHz  |                      |  |  |  |  |
| Nominal Temperature                   | T <sub>NOM</sub>         |             | +25  |       | °C   |                      |  |  |  |  |
| Load Capacitance                      | CL                       |             | 8.0  |       | pF   |                      |  |  |  |  |
| Frequency Tolerance                   | df/F                     | 20.0        |      | +20.0 |      | +25±3°C              | by Measurement<br>Conditions                       |  |  |  |
| Frequency Temperature Characteristics | df/F                     | -20.0       |      | +20.0 | PPM  | -30 to +85°C         | Based on an<br>oscillation frequency<br>at + 25 °C |  |  |  |
| Frequency Aging Rate                  |                          | -1.0        |      | +1.0  |      | 1 <sup>st</sup> year | +25±3°C  |  |  |  |
| Eqyuvalent Series Resistance          | ESR                      |             |      | 80    | Ω    |                      | by Measurement<br>Conditions                       |  |  |  |
| Drive Level                           | Pb                       | 0.01        |      | 100   | μW   |                      |  |  |  |  |
| Insulation Resistance                 | IR                       | 500         |      |       | МΩ   | 100V(DC)             |  |  |  |  |

## 3.Measurement Condition

Frequency measurement

Measuring instrument : IEC PI-Network Test Fixture

 $\begin{tabular}{lll} Load capacitance & :8.0pF \\ \hline Drive Level & :10 \mu W \\ \hline \end{tabular}$ 

Equivalent series resistance (ESR) measurement

Measuring instrument : IEC PI-Network Test Fixture

Load capacitance :Series

Drive Level :10µW



