



actual size

# Quartz Crystal · JTX310

SMD Tuning Fork Crystal · 3.2 x 1.5 mm

- 32.768 kHz
- reflow soldering temperature: 260 °C max.
- package height 0.9 mm max.



## General Data

| type                                 | JTX 310  |
|--------------------------------------|--|
| frequency                            | 32.768 kHz   |
| frequency tolerance at 25 °C ± 5 °C  | ± 10 ppm / ±20 ppm / ± 30 ppm  |
| load capacitance $C_L$               | 12.5 pF (others on request)  |
| temperature constant                 | -0.04 · 10 <sup>-6</sup> / °C <sup>2</sup> max.<br>-0.034 · 10 <sup>-6</sup> / °C <sup>2</sup> typical |
| frequency temperature characteristic | $f \text{ (ppm)} = -0.04 (25 \text{ °C} - T)^2$<br>T = requested temperature                           |
| operating temperature range          | -20 °C ~ +70 °C / -40 °C ~ +85 °C  |
| shunt capacitance $C_0$              | 1.0 pF ~ 1.5 pF typical  |
| series resistance max. ( ESR )       | 50 kΩ typ. ( 80 kΩ max.)   |
| storage temperature                  | -40 °C ~ +85 °C  |
| drive level max.                     | 0.5 μW   |
| aging first year                     | < ± 3 ppm  |

## Frequency Stability vs. Temperature

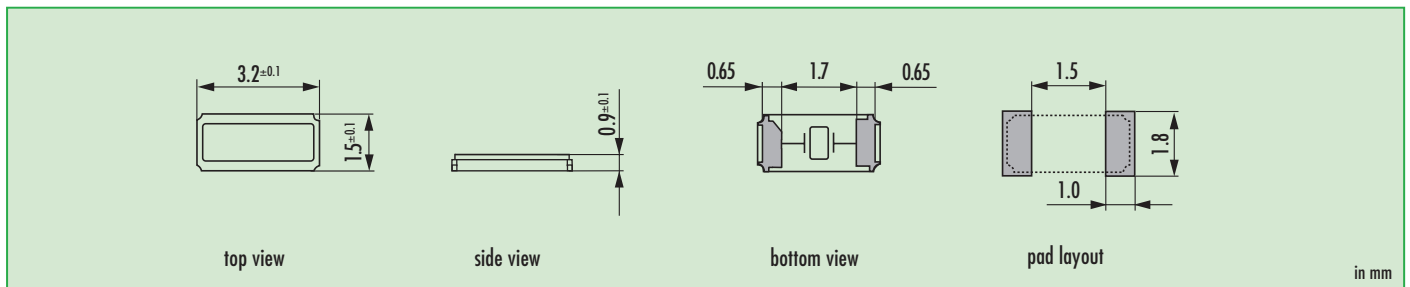
|                 |      | - 80 ppm | - 160 ppm |
|-----------------|------|----------|-----------|
| -20 °C ~ +70 °C | STD. | ●        |           |
| -40 °C ~ +85 °C | T1   |          | ●         |

● standard

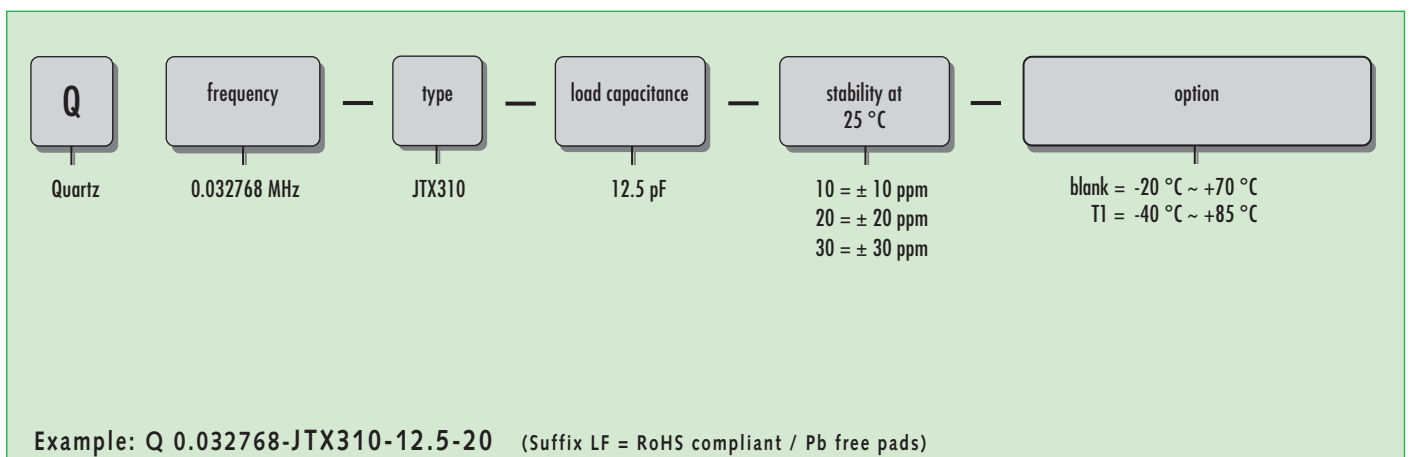
## Marking

company code  
date code or production code

## Dimensions

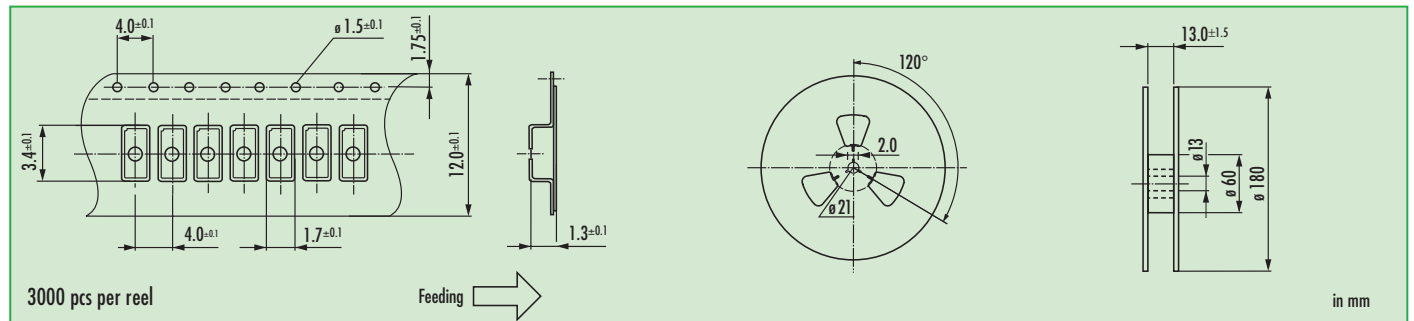


## Order Information



# Quartz Crystal · JTX310

## Taping Specification



## Reflow Soldering Profile

