



No.11-3 Jianguo Rd., T.E.P.Z. 42760 Taiwan, ROC

All dimensions are millimeters.

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|---------|-----------------|
| CAD: | TCR |
| Review: | EG |
| Appr: | JL |
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| Date: | August 01, 2022 |

Specification Title:

**Quartz Crystal-Tuning Fork
2.0 x 6.0 mm Cylindrical Package
32.768 KHz
General Product Specification**

Series Name: CT26 Series

Electrical Specifications:

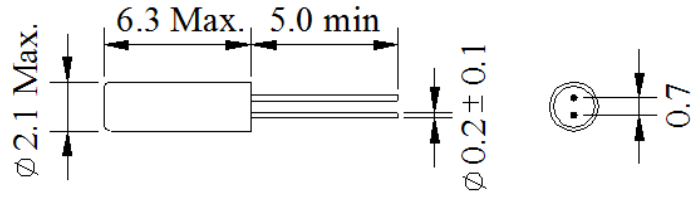
| | | | |
|-----------------------------------|----------|---------------------------------|--------------|
| Nominal Frequency | | 32.768 | KHz |
| Frequency Tolerance at 25°C | Standard | ±20 | PPM |
| | Optional | ±10 | |
| Aging | | ±5 | PPM Max/Year |
| Turnover Temperature | | 25 ±5 | °C |
| Temperature Coefficient | | -0.035 Typ. PPM/°C ² | |
| Temperature Range (Operating) | Standard | -20 to +70 | |
| | Optional | -40 to +85 | |
| Storage Temperature Range | | -55 to +125 | |
| Equivalent Series Resistance(ESR) | | 40 | K Ohm Max |
| Load Capacitance | Standard | 12.5 | pF |
| | Optional | 6.0 | |
| Shunt Capacitance | | 1.55 | pF Typ |
| Motional Capacitance | | 3.0 | fF Typ |
| Drive Level | | 1.0 | uW Max |
| Insulation Resistance | | 500 at 100 Vdc ± 15 Vdc | M Ohm |
| Quality Factor | | 50000 | Typ |
| Ratio Of Capacitance | | 500 | |

Notes:

- 1- Manual or Hand soldering is 350 °C Max for 3 seconds
- 2- Product is shipped in bulk.
- 3- Specification is subject change without notice.

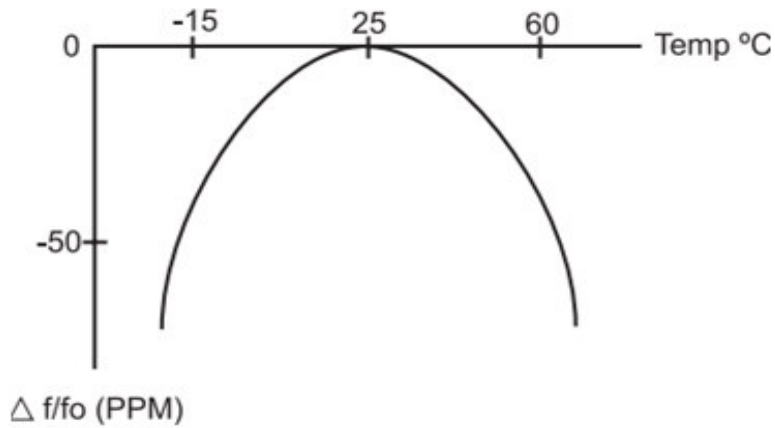
| | | | | |
|----------------------------------|-----|-----------|------|------|
| RoHS Compliant Pb - Lead Free | Ltr | Revisions | Date | Appr |
| | | | | |
| | | | | |
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Mechanical Outline:



Dimensions are millimeters.

Frequency vs. Temperature Characteristics:



To calculate the frequency stability the parabolic curvature constant (K) is needed.

For calculating the stability at 45 °C?

1- Change in temperature (ΔT) is $(45-25) = +20$ °C

2- Change in frequency is $(-0.035 \times (\Delta ^\circ\text{C})^2 =$

$(-0.035 \times (20)^2 = -14$ PPM

How to build a Part Number:

| | | | |
|----------------------------|-----------------|------------------|---------------------------------|
| Series | | CT | Parameter |
| Package | | 26 | 2.0 x 6.0 mm Cylindrical |
| | | - | |
| Frequency | | 32.768 | KHz |
| | | - | |
| Load Capacitance | Standard | 12.5 | 12.5pF |
| | Option | 6 | 6pF |
| | | - | |
| Frequency Tolerance | Standard | 20 | ±20PPM |
| | Option | 10 | ±10PPM |
| | | - | |
| Temperature Range | Standard | See Notes | -20 to +70 °C |
| | Option | X | -40 to +85 °C |
| | | - | |
| Packaging | | See Notes | Bulk |

Part Number Example:

CT26-32.768-12.5-20-X

CT26 - 2.0 x 6.0 mm Cylindrical Package

32.768 KHz Nominal Frequency

12.5 pF Standard Load Capacitance

20:±20 PPM Frequency Tolerance

X:-40 to +85° C Temperature Range

Notes:

- 1- Standard Temperature Range does not need to be included in Part Number description.**
- 2- Quantities less than 3000 are shipped bulk in ESD pouches.**
- 3- Specification subject to change without notice.**

| | | | |
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