Crystal Oscillator

NH25M22TA

High Precision Oscillator (Twin-OCXO) for Fixed Communication Equipment

- Base stations for system mobile communications
- High-end router
- Synthesizer
- Measuring instrument
- Exchanger
- Optical transmission system

**Features**

- Compact and excellent temperature characteristics.
- Excellent long-term frequency stability.
- Excellent phase noise characteristics.
- Supports wide temperature range.
- Hermetic sealing package for excellent environmental-proof performance.

**Specifications**

| Item                              | Nominal Frequency Range (MHz) | Nominal Frequency $f_{nom}$ (MHz) | Supply Voltage $V_{cc}$ (V) | Load Impedance $C_L$ (pF) | Operating Temperature Range $T_{op}$ (°C) | Storage Temperature Range $T_{str}$ (°C) | Power Consumption $P_{CC}$ (W) at start | Frequency Tolerance $\Delta f/f_{nom}$ at +25°C, $V_{cont}$ = Center, before shipment | Frequency/Temperature Characteristics $\Delta f/f$ at Operating Temperature Range | Frequency/Voltage Coefficient $\Delta f/f$ $V_{CC}$ | Long-term Frequency Stability $\Delta f/f$ Based on frequency after 30 days operation | Stabilization Time (min.) Time within specified frequency tolerance after power on at +25°C, based on frequency after 60 minutes operation. | Frequency Control Range $\Delta f/f$ $V_{cont}$ | Frequency Change Polarity | Linearity (%) | Output Voltage | Symmetry (%) | Specification Number |
|----------------------------------|------------------------------|----------------------------------|-----------------------------|--------------------------|---------------------------------------------|------------------------------------------|---------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Model NH25M22TA                  | 5 to 40                      | 10, 12.8, 13, 19.2, 20, 25.6, 30.72, 38.88 | +3.3                        | 15                       | -40 to +85                                  | -40 to +85                               | Max. 4.0                                      | Max. $10^{-6}$                                                 | Max. $\pm3 \times 10^{-6}$                                    | Max. $\pm10^{-9}$                                            | Max. $\pm80 \times 10^{-9}$/year                                    | Max. 5 / within $\pm100 \times 10^{-9}$                            | $V_{cont}$ = +1.4V±1.4V                                           | Positive                                                        | Typ. ±1                                                      | LVCMOS $V_{OL}$ : Max. +0.3 V $V_{CH}$ : Min. +3.0 V             | at $(V_{CH} + V_{CL}) / 2$                                      | NSA3566A                                                          |

**Dimensions**

Terminal land connections

- #1 $V_{cont}$
- #2 DNC (Don’t connect)
- #3 $V_{cc}$
- #4 OUTPUT
- #5 DNC (Don’t connect)
- #6 DNC (Don’t connect)
- #7 GND

Tolerance ±0.2

It might be printed management code to the bottom.

**Reference Value**

<table>
<thead>
<tr>
<th>Offset Frequency (at 10 MHz)</th>
<th>dBc/Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hz</td>
<td>-80</td>
</tr>
<tr>
<td>10 Hz</td>
<td>-105</td>
</tr>
<tr>
<td>100 Hz</td>
<td>-130</td>
</tr>
<tr>
<td>1 kHz</td>
<td>-150</td>
</tr>
<tr>
<td>10 kHz</td>
<td>-160</td>
</tr>
</tbody>
</table>

We offer dedicated tool (charge) for evaluation of this product.

Please specify the model name, frequency, and specification number when you order products.

For further questions regarding specifications, please feel free to contact us.