Temperature Compensated Crystal Oscillators (TCXO, VCTCXO)
Surface Mount Type TCXO (LSI Type)  KT2016 Series

Features
• Miniature SMD type (2.0×1.6×0.8mm)
• Freq. temp. characteristics: ±2.0×10⁻⁶/⁻⁶ to +85°C
• 1.68 to 3.63V available
• Reflow compatible
• Operating Temp. −40 to +105°C (Option)
• Ultra low supply current 800μA typ.
• RoHS Compliant

Applications
• Mobile Communications, W-LAN
• Low power radio communications
• GPS Unit

How to Order
KT2016K 26000 A C W 18 T xx
④ Lower Operating Temp. ⑤ Upper Operating Temp. ⑥ Supply Voltage
A ±0.5×10⁻⁶ T TCXO
B ±1.0×10⁻⁶
C ±1.5×10⁻⁶
D ±2.0×10⁻⁶
⑦ Voltage Control Function ⑧ Option Code
C −30°C E −20°C G −10°C
W +85°C V +80°C U +75°C

Packaging (Tape & Reel 15000 pcs./reel)

Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Symbol</th>
<th>Conditions</th>
<th>Min.</th>
<th>Max.</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Frequency Range</td>
<td>fo</td>
<td></td>
<td>10</td>
<td>52</td>
<td>MHz</td>
</tr>
<tr>
<td>Frequency Tolerance</td>
<td>f_tol</td>
<td>vs Temperature</td>
<td>−0.5/−2</td>
<td>+0.5/+2</td>
<td>×10⁻⁶</td>
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<tr>
<td></td>
<td></td>
<td>vs Load</td>
<td>−0.2</td>
<td>+0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>vs Voltage</td>
<td>−0.2</td>
<td>+0.2</td>
<td></td>
</tr>
<tr>
<td>Frequency Aging</td>
<td>f_age</td>
<td>Per Year</td>
<td>−1</td>
<td>+1</td>
<td>×10⁻⁶</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>T_stg</td>
<td>−40</td>
<td>+85</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>T_use</td>
<td>−30</td>
<td>+85</td>
<td>°C</td>
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<tr>
<td>Voltage Control Range</td>
<td>f_cont</td>
<td>Positive</td>
<td>±8</td>
<td>±15</td>
<td>×10⁻⁶</td>
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<tr>
<td>Supply Voltage</td>
<td>Vcc</td>
<td>1.68</td>
<td>3.63</td>
<td>V</td>
<td></td>
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<tr>
<td>Output Level</td>
<td>Vpp</td>
<td>Clipped Sine*, Load: 10k ohm / 10pF</td>
<td>0.8</td>
<td>—</td>
<td>Vp-p</td>
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<tr>
<td>Current Consumption</td>
<td>Icc</td>
<td>—</td>
<td>2</td>
<td>mA</td>
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<tr>
<td>Harmonics</td>
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<td>—</td>
<td>−5</td>
<td>dBc</td>
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</tbody>
</table>

* : A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor (≥1nF) to the line-out terminal of the oscillator.
* : Please contact us for other specifications.

Dimensions (Unit: mm)

Test Circuit

Recommended Land Pattern (Unit: mm)

Note: A capacitor of value 0.05uF between V+ and GND is recommended.