Specification of Quartz Crystal Controlled Oscillators



1 NDK Part Number NT3225SA-26M-DJA3004A

NDK Specification Number
Type
DJA3004A
NT3225SA

4 Rating

4.1 Nominal Frequency (f_{nom}) 26 MHz (2 digits marking)

4.2 Supply Voltage +2.4 V DC (-Earth)

4.3 Current Consumption Max. 1.5 mA

4.4 Output Voltage Min. 0.8 V_{p-p} Clipped sine wave (DC-Coupling)

4.5 Operable Temperature Range
4.6 Storage Temperature Range
4.75 °C
4.6 -40 to +85 °C

4.7 Load impedance $(10 k\Omega // 10 pF) +/-10\%$

4.8 DC-cut Capacitor DC-cut capacitor of output is not put in TCXO.

Please add DC-cut capacitor (1000 pF) in output line.

5 Electrical specification

5.1 Frequency Stability

5.1.1 Frequency / Temperature Characteristics Max. +/-2.5 ppm / -30 to +75 °C (Based on frequency at +25 +/-2 °C)

Positive

5.1.2 Frequency / Voltage Coefficient Max. +/-0.3 ppm / +2.4 V +/-0.1 V

5.1.3 Frequency / Load Coefficient Max. +/-0.2 ppm / $(10 k\Omega // 10 pF)$ +/-10%

5.1.4 Frequency Tolerance at Control Voltage Max. +/-1.5 ppm

(at +25 +/-2 °C, before reflow soldering, based on nominal frequency)

(Unit: mm)

5.1.5 Long-term Frequency Stability Max. +/-2.0 ppm / 5years

5.2 External Adjustment

 $(V_{cont} = +1.2 V DC)$

5.2.1 Control Voltage (V_{cont}) +1.2 V +/-1.0 V DC

5.2.2 Frequency control range based on frequency at V = +1.3 V DC +/-9.0 to +/-15.0 ppm

frequency at V_{cont} = +1.2 V DC

5.2.3 Frequency Change Polarity

5.3 Stabilization Time Max. 4.0 ms

(+/-0.1 ppm of final frequency final frequency is the frequency after 10 s from the point when supply voltage is reached at+2.4 V. Measurement is done while the

control voltage is kept at its typical value at +25 +/-2 °C)

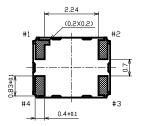
5.4 Symmetry 40 to 60 %

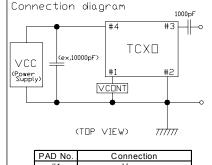
5.5 Phase Noise Max. -130 dBc/Hz (@1 kHz offset)

6 Dimension









PAD No.	Connection
#1	V _{CONT}
#2	GND
#3	OUTPUT
#4	V _{CC}

Jan.12.2010