Specification of Quartz Crystal Units



1 NDK Part Number NX3225SA-32MHZ-EXS00A-CS02368

2 Chipset Maker FREESCALE

3 Application ZigBee/RF4CE, IEEE® 802.15.4 SOC Solution

Sub-1 GHz (ISM Frequency Band) RF Transceiver SIP

Chipset Name MC1323X

MC12311

5 NDK Specification Number EXS00A-CS02368

6 Type NX3225SA

7 Electrical Characteristics

4

7.1 Nominal Frequency (f_{nom}) 32.000 MHz
7.2 Overtone order Fundamental
7.3 Adjustment tolerance $\pm 10 \times 10^{-6}$ max.

7.4 Tolerance over the temperature range $\pm 16 \times 10^{-6}$ max. (at -40 to +85 °C)

7.5 Equivalent Series Resistance (R_r) 50 Ω max. 7.6 Shunt Capacitance (C_0) 1.42 pF ±20% 7.7 Maximum Drive Level 100 μ W max.

8 Measurement Circuit

8.1 Frequency Measurement

8.1.1 Measuring Instrument IEC π -Network

8.1.2 Load Capacitance (C_L) 9pF 8.1.3 Level of Drive 10 μ W

8.2 Equivalent Resistance Measurement

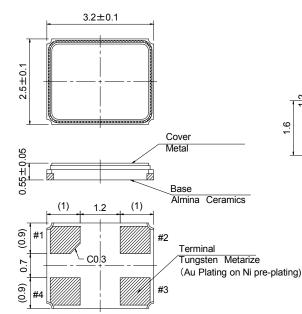
8.2.1 Measuring Instrument IEC π -Network

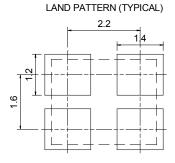
8.2.2 Load Capacitance (C_L) Series 8.2.3 Level of Drive 10 μ W

9 Operating Temperature Range -40 to +85 °C 10 Storage Temperature Range -40 to +85 °C

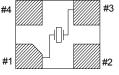
11 Dimension

(Unit: mm)





[TOP VIEW]
TERMINAL LAND CONNECSIONS
#4 #3



※ #1,#3 : Xtal

#2,#4: GND (CONNECTION COVER)