

## Specification of Quartz Crystal Units

1	NDK Part Number	See table 1
2	NDK Specification Number	STD-CSR-1
3	Type	NX3225SA
4	Electrical Characteristics	
4.1	Nominal Frequency ( $f_{nom}$ )	See table 1
4.2	Overtone order	Fundamental
4.3	Frequency Tolerance	$\pm 15 \times 10^{-6}$ max. ( +25 °C )
4.4	Frequency Versus Temperature Characteristics	$\pm 15 \times 10^{-6}$ max. ( -10 ~ +75 °C ) The reference temperature shall be +25 °C
4.5	Equivalent Series Resistance ( $R_r$ )	See table 1
4.6	Shunt Capacitance ( $C_0$ )	NA
4.7	Maximum Drive Level	200 $\mu$ W max.
5	Measurement Circuit	
5.1	Frequency Measurement	
5.1.1	Measuring Instrument	$\pi$ -network
5.1.2	Load Capacitance ( $C_L$ )	8 pF
5.1.3	Level of Drive	10 $\mu$ W
5.2	Equivalent Resistance Measurement	
5.2.1	Measuring Instrument	$\pi$ -network
5.2.2	Load Capacitance ( $C_L$ )	Series
5.2.3	Level of Drive	10 $\mu$ W
6	Operable Temperature Range	-10 ~ +75 °C
7	Storage Temperature Range	-40 ~ +85 °C
8	Dimension	

Table1

$f_{nom}$ (MHz)	$R_r$ ( $\Omega$ ) max.	NDK Part Number
12.000	100	NX3225SA-12.000M-STD-CSR-1
13.560	80	NX3225SA-13.560M-STD-CSR-1
14.31818	80	NX3225SA-14.31818M-STD-CSR-1
16.000	80	NX3225SA-16.000M-STD-CSR-1
16.384	80	NX3225SA-16.384M-STD-CSR-1
18.432	80	NX3225SA-18.432M-STD-CSR-1
18.870	80	NX3225SA-18.870M-STD-CSR-1
20.000	50	NX3225SA-20.000M-STD-CSR-1
22.000	50	NX3225SA-22.000M-STD-CSR-1
22.5792	50	NX3225SA-22.5792M-STD-CSR-1
24.000	50	NX3225SA-24.000M-STD-CSR-1
24.576	50	NX3225SA-24.576M-STD-CSR-1
25.000	50	NX3225SA-25.000M-STD-CSR-1
26.000	50	NX3225SA-26.000M-STD-CSR-1
27.000	50	NX3225SA-27.000M-STD-CSR-1
27.120	50	NX3225SA-27.120M-STD-CSR-1
28.63636	50	NX3225SA-28.63636M-STD-CSR-1
30.000	50	NX3225SA-30.000M-STD-CSR-1
32.000	50	NX3225SA-32.000M-STD-CSR-1
36.000	50	NX3225SA-36.000M-STD-CSR-1
40.000	50	NX3225SA-40.000M-STD-CSR-1
44.000	50	NX3225SA-44.000M-STD-CSR-1
48.000	50	NX3225SA-48.000M-STD-CSR-1
54.000	50	NX3225SA-54.000M-STD-CSR-1

(Unit: mm)

