

1	NDK Part Number	NX3215SA-32.768K-STD-MUA-8
2	NDK Specification Number	STD-MUA-8
3	Type	NX3215SA
4	Electrical Characteristics	
4.1	Nominal Frequency ( $f_{\text{nom}}$ )	32.768 kHz
4.2	Overtone order	Fundamental
4.3	Frequency Tolerance	$\pm 20 \times 10^{-6}$ max. ( +25 °C )
4.4	Turning Point	+ 25°C $\pm$ 5°C
4.5	Temperature coefficient	-0.04 $\times 10^{-6}$ / °C <sup>2</sup> max.
4.6	Equivalent Series Resistance ( $R_r$ )	70 k $\Omega$ max.
4.7	Shunt Capacitance ( $C_0$ )	1.0 $\pm$ 0.5 pF
4.8	Motional capacitance ( $C_1$ )	4.0 $\pm$ 2.0 fF
4.9	Maximum Drive Level	0.5 $\mu$ W max.
5	Measurement Circuit	
5.1	Frequency Measurement	
5.1.1	Measuring Instrument	Network Analyzer (CNA-LF made in Transat corp.)
5.1.2	Load Capacitance ( $C_L$ )	12.5 pF
5.1.3	Level of Drive	0.1 $\mu$ W
5.2	Equivalent Resistance Measurement	
5.2.1	Measuring Instrument	Network Analyzer (CNA-LF made in Transat corp.)
5.2.2	Load Capacitance ( $C_L$ )	Series
5.2.3	Level of Drive	0.1 $\mu$ W
6	Operable Temperature Range	-40 ~ +85 °C
7	Storage Temperature Range	-40 ~ +85 °C
8	Aging ( at +25 °C )	$\pm 3 \times 10^{-6}$ Max. / 1 year
9	Dimension	

(Unit: mm)

