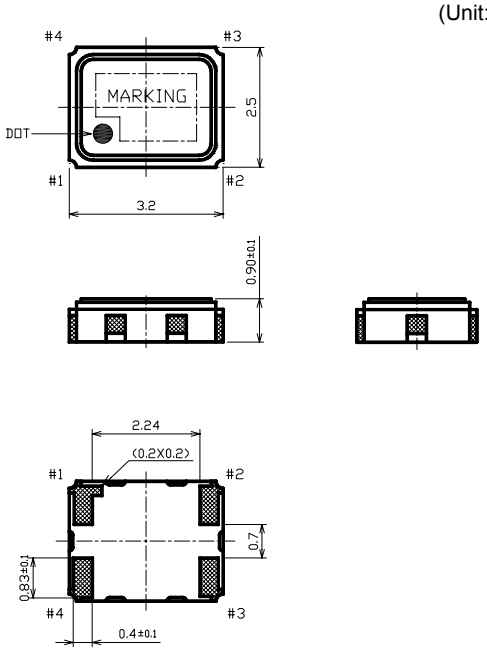
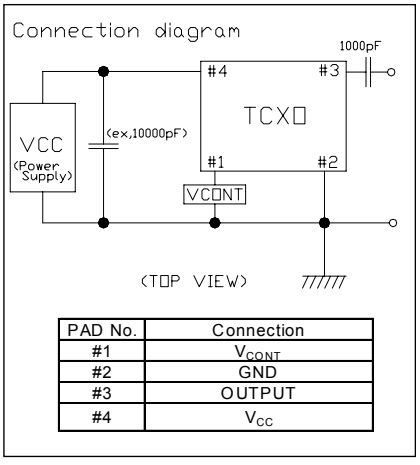
1	**NDK Part Number**	NT3225SA-19.2M-DJA3002A
2	**NDK Specification Number**	DJA3002A
3	**Type**	NT3225SA
4	**Rating**	
4.1	Nominal Frequency (f_{nom})	19.2 MHz (3 digits marking without the decimal point: 192)
4.2	Supply Voltage	+2.8 V DC (-Earth)
4.3	Current Consumption	Max. 1.5 mA
4.4	Output Voltage	Min. 0.8 V_{p-p} Clipped sine wave (DC-Coupling)
4.5	Operable Temperature Range	-30 to +75 °C
4.6	Storage Temperature Range	-40 to +85 °C
4.7	Load impedance	(10 kΩ // 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)
5.1.2	Frequency / Voltage Coefficient	Max. +/-0.3 ppm / +2.8 V +/-0.1 V
5.1.3	Frequency / Load Coefficient	Max. +/-0.2 ppm / (10 kΩ // 10 pF) +/-10%
5.1.4	Frequency Tolerance at Control Voltage (V_{cont} = +1.2 V DC)	Max. +/-1.5 ppm (at +25 +/-2 °C, before reflow soldering, based on nominal frequency)
5.1.5	Long-term Frequency Stability	Max. +/-1.0 ppm / year
5.2	**External Adjustment**	
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_{cont} = +1.2 V DC	+/-9.0 to +/-15.0 ppm
5.2.3	Frequency Change Polarity	Positive
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+2.8 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**	

(Unit: mm)





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

Jan.12.2010