

Specification of Temperature Compensated Crystal Oscillators

- 1. NDK Part Number** NT2016SA-32M-END4263A
2. NDK Specification Number END4263A
3. Type NT2016SA
4. Absolute Maximum ratings

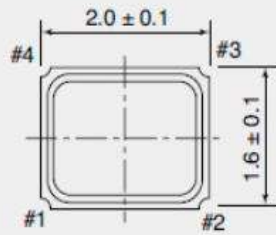
	Item	Ratings			Notes
		Min.	Max.	Units	
1	Supply Voltage	-0.6	+4.6	V	-
2	Storage temp. range	-40	+85	°C	-

5. Electrical Specification

	Parameters	SYM.	Electrical Spec.				Notes
			Min.	Typ.	Max.	Units	
1	Nominal frequency	f _{nom}	32			MHz	-
2	Supply voltage	V _{cc}	+1.8	+3.0	+3.0	V	-
3	Current consumption	-	-	-	2	mA	-
4	Output voltage	-	0.8	-	-	V _{p-p}	Clipped sine wave (DC-Coupling)
5	Operating temp. rage	-	-30	-	+85	°C	-
6	Load impedance (resistance part)	-	9	10	11	kΩ	-
7	Load impedance (parallel capacitance)	-	9	10	11	pF	-
8	DC-cut capacitor	-	-	-	-	-	DC-cut capacitor of output is not put in TCXO.Please add DC-cut capacitor(1,000pF)in output line.
9	Frequency/ temperature characteristics	-	-2.5	-	+2.5	ppm	-30 to +85°C(Based on frequency at +25+/- 2°C)
10	Frequency/ Voltage coefficient	-	-0.1	-	+0.1	ppm	+3.0V+/-5%
11	Frequency/ Load coefficient	-	-0.1	-	+0.1	ppm	(10kΩ//10pF)+/-10%
12	Frequency tolerance	-	-1.0	-	+1.0	ppm	at +/-25°C+/-2°C,Before reflow soldering, based on nominal frequency
13	Long-term frequency stability	-	-1.0	-	+1.0	ppm	year(at +25°C+/-2°C)
14	Phase noise	-	-	-86		dBc/Hz	@10 Hz offset
		-	-	-114		dBc/Hz	@100 Hz offset
		-	-	-137		dBc/Hz	@1 kHz offset
		-	-	-149		dBc/Hz	@10 kHz offset
		-	-	-150		dBc/Hz	@100 kHz offset
							at +25°C+/-2°C
15	G Sensitivity	-	-	-	2	ppb/G	(30 Hz to 1500 Hz random vibration in each of 3-axis)

6. Dimension

mm



Terminal land connections

#1	NC or GND (ground recommended)
#2	GND
#3	OUTPUT
#4	V _{CC}



Land pattern (Typical)

