Specification of Temperature Compensated Crystal Oscillators



1. NDK Part Number NT3225SA-19.2M-DJA3002B

2. NDK Specification NumberDJA3002B3. TypeNT3225SA

4. Electrical Specification

	Parameters	SYM.	Electrical Spec.				N		
			Min. Typ. Max.			Units	Notes		
1	Nominal frequency	fnom	1	9.200)	MHz	-		
2	Supply voltage	Vcc	-	+2.8	-	V	-		
3	Current consumption	-	-	-	1.5	mA	-		
4	Output voltage	-	0.8	-	-	Vp-p	Clipped sine wave (DC-Coupling)		
5	Operating temp. rage	-	-30	_	+75	${\mathbb C}$	-		
6	Storage temp. rage	-	-40	_	+85	$^{\circ}$	-		
7	Load impedance (resistance part)	-	9	10	11	kΩ	-		
8	Load impedance (parallel capacitance)	-	9	10	11	pF	-		
9	DC-cut capacitor	-	-	-	1	-	DC-cut capacitor of output is not put in TCXO.Please add DC-cut capacitor(1,000pF)in output line.		
10	Frequency/ temperature characteristics	-	-2.5	ı	+2.5	ppm	-30to+75 $^{\circ}$ C(Based on frequency at +25+/-2 $^{\circ}$ C)at control voltage (Vcont)=+1.2VDC		
11	Frequency/ Voltage coefficient	-	-0.3	-	+0.3	ppm	+2.8V+/-0.1V		
12	Frequency/ Load coefficient	1	-0.2	-	+0.2	ppm	(10kΩ//10pF)+/-10%		
13	Frequency tolerance	-	-1.5	-	+1.5	ppm	+/-25 $^{\circ}$ +/-2 $^{\circ}$,Before reflow soldering,based on nominal frequency at controlvoltage (Vcont)=+1.2VDC.		
14	Long-term frequency stabillity	-	-1.0	-	+1.0	ppm	year(at +25℃)		
15	Control voltage	Vcont	+0.2	+1.2	+2.2	V	-		
16	Frequency control range	-	-15.0	-	-9.0	ppm	Vcont= +0.2V	Based on frequency at Vcont+1.2VDC	
		-	+9.0	1	+15.0	ppm	Vcont= +2.2V		
17	Frequency change polarity	-	-	-	1	_	Positive		
18	Stabilization time	-	-	-	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		
19	Symmetry	-	40	-	60	%	Based on GND after DC removal.		
20	Phase noise	-	-	-	-130	dBc/Hz	@1 kHz offset		
	i								

5. Dimension mm Terminal land connections 3.2 ± 0.2 #3 #4 #1 Voont #2 GND OUTPUT #3 #4 Vcc Land pattern (Typical) 2.65 2.24 ± 0.2 0.3 (0.2×0.2) 0.4 ± 0.1

2016.07.25

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

NDK:

NT3225SA-19.2M-DJA3002B