Product Specification
TCXO

Model	6TN4800001
Size	2016
Frequency	48.000000MHz
Type	TCXO
Vcc	+1.7V ~ +3.3V
Vcont	-
AFC Range	-
Temp.	±2.0ppm max.@-30 ~ +85℃
Slope	±0.2ppm/℃ max.@-20 ~ +70℃
Initial Frequency	±1.0ppm max.

Issued	2017.04.10
Revised	
Customer	
Prepared part	R&D
Drawn	BaiCuiLi
Checked	Jin Zhe
Approved	Liu GuoQiang

1. Electrical Characteristics

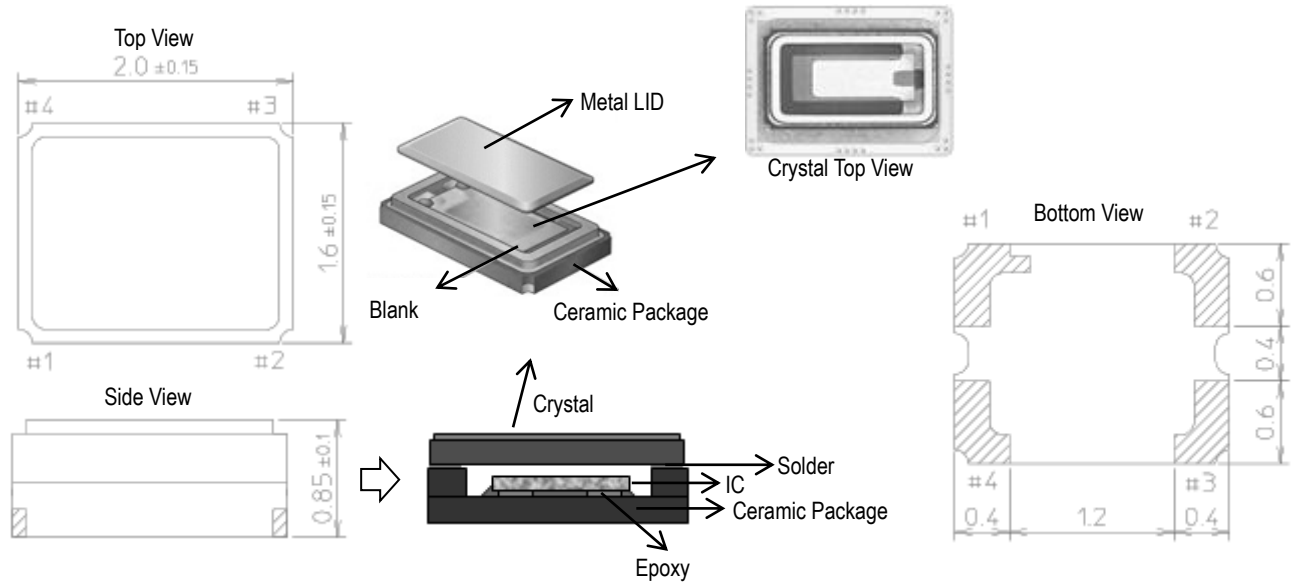
Supply Voltage(Vcc)	+1.8V±5%
	+2.4V±5%
	+2.8V±5%
	+3.0V±5%
Output Load	10kohm//10pF±10%
Control Voltage(Vcont)	-

Parameter	Value	Conditions
Output Level	0.8Vp-p min	Clipped sine wave(DC-coupled)
Current	1.5mA max	10koms//10pF±10%
Operating Temperature Range	-30~+85℃	
Storage Temperature Range	-40~+85℃	
Frequency Stability		
vs. Temperature(-30 ~ +85℃)	±2.0ppm max.	Referenced to +25℃ frequency
vs. Supply Voltage	±0.2ppm max.	+1.8V±5%, +2.4V±5%,+2.8V±5%, +3.0V±5%
vs. Load	±0.2ppm max.	10koms//10pF±10% each
vs. Aging	±1.0ppm max.	1Year
vs. Reflow soldering	±1.0ppm max.	2times
Frequency Stability Slope		
vs. Temperature(-20 ~ +70℃)	±0.2ppm/℃ max.	Every +2℃
Initial Frequency Tolerance	±1.0ppm max.	+25℃
Startup Time	2ms max.	more than 90% of final amplitude
Voltage Control Range	-	-
Phase Noise	-88dBc/Hz typ. -113dBc/Hz typ. -133dBc/Hz typ. -148dBc/Hz typ. -152dBc/Hz typ.	10Hz offset 100Hz offset 1KHz offset 10KHz offset 100KHz offset

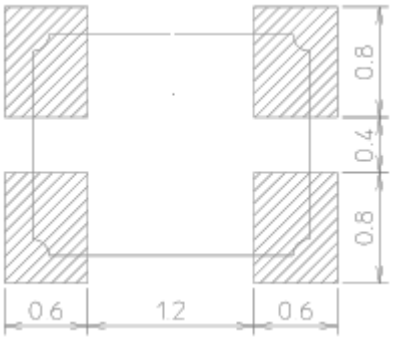
Notes:
- Please leave after reflow in 2h or more at room ambient

2. Outline Specification

Unit： mm

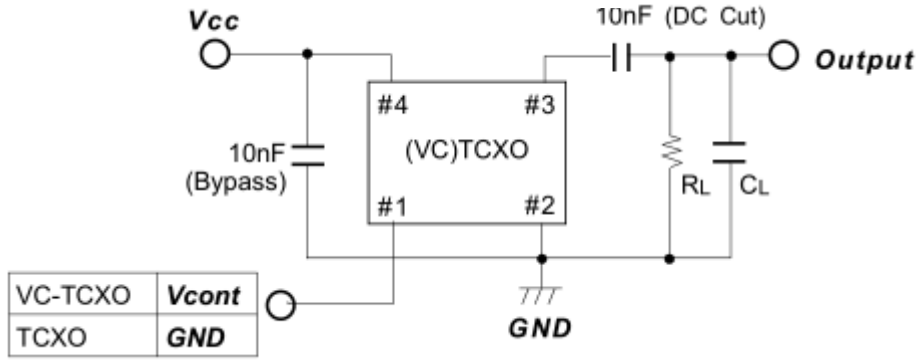


Recommended Land Pattern



Pad No.	Connection	
	TCXO	VC-TCXO
#1	GND	Vcont
#2	GND	GND
#3	Output	Output
#4	Vcc	Vcc

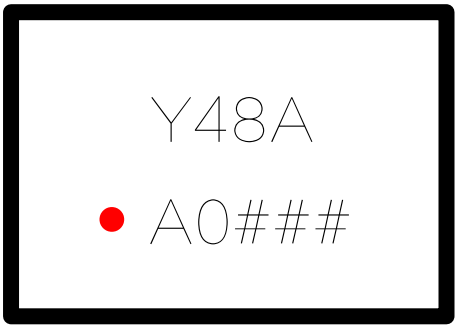
Measurement Circuit



Notes：

- Please connect a bypass capacitor closely to Vcc Pad.
- Load capacitance (CL) includes probe and test board capacitance.

3. Marking Specification



●Mark-1: Y (①) 48A (②~④)

●Mark-2: ● (①) A0 (②~③) ### (④~⑥)

Mark-1		
Digit order	**Symbol**	**Explanation**
1	Y	YL(YouLian)
2~4	48A	Frequency
Mark-2		
Digit order	**Symbol**	**Explanation**
1	●	Index
2~3	A0	Serial Number(A0~Z9)
5~7	***	Production Year + Month + Day

Frequency:48A					
Symbol	**Frequency [MHz]**	**Symbol**	**Frequency [MHz]**	**Symbol**	**Frequency [MHz]**
16B	16.367667	13A	13.000000	40A	40.000000
16C	16.367000	19B	19.200000	38B	38.400000
16D	16.367600	26A	26.000000	30A	30.000000
16E	16.368000	32A	32.000000	**48A**	**48.000000**
16F	16.369000	32B	32.768000		