Product Specification

TCXO

Model	**3TG1920001**
Size	**3225**
Frequency	**19.200000MHz**
Type	**TCXO**
Vcc	**1.7 to 3.3V**
Vcont	**-**
AFC Range	**-**
Temp.	**±0.5ppm @ -30 to +80'C**
Initial Frequency	**±1.0ppm**

Issued Date	2015.7.29
Revised Date	
Customer	
Prepared part	R&D
Drawn	Bai CuiLi
Checked	Jin Zhe
Approved	Liu GuoQiang

TCXO 3TG1920001	**Product Specification**	Produced date Revised date	2015.07.29

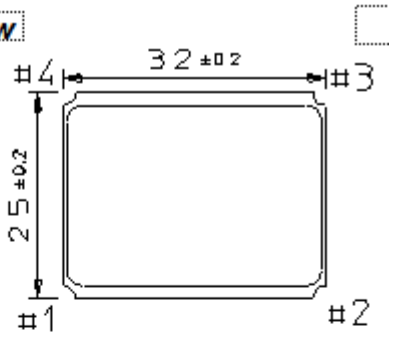
1. Electrical Characteristics

Supply Voltage (Vcc)	1.7 to 3.3V
Output Load	10kohm//10pF ±10%
Control Voltage (Vcont)	-

Parameter	Value	Conditions
Output Level	0.8 Vp-p min	Clipped sine wave (DC-coupled)
Current	1.5mA max.	
Operating Temperature Range	-30'C to +80'C	
Storage Temperature Range	-40'C to +85'C	
Frequency Stability		
vs. Temperature	±0.5ppm max.	Referenced to 25'C frequency
vs. Supply Voltage	±0.3ppm max.	Input Voltage(Vcc) ±5%
vs. Load	±0.2ppm max.	10kohm//10pF ±10% each
vs. Aging	±1.0ppm max.	1 Year
vs. Reflow soldering	±1.0ppm max.	2 times
Initial Frequency Tolerance	±1.0ppm max.	25'C
Voltage Control Range	-	-
Startup Time	3ms max.	more than 90% of final amplitude,
Phase Noise	-86 dBc/Hz typ. -110 dBc/Hz typ. -130 dBc/Hz typ. -144 dBc/Hz typ. -144 dBc/Hz typ.	10Hz offset 100Hz offset 1KHz offset 10KHz offset 100KHz offset

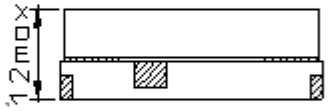
2. Outline Specification

Top View

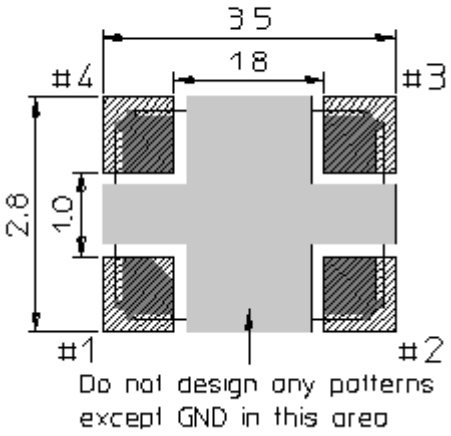


Pad No.	Connection
	TCXO
#1	GND
#2	GND
#3	Output
#4	Vcc

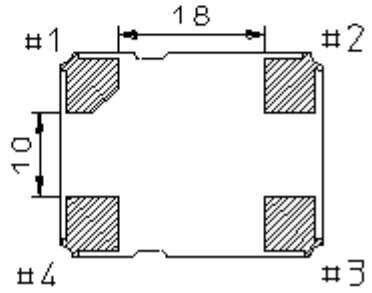
Side View



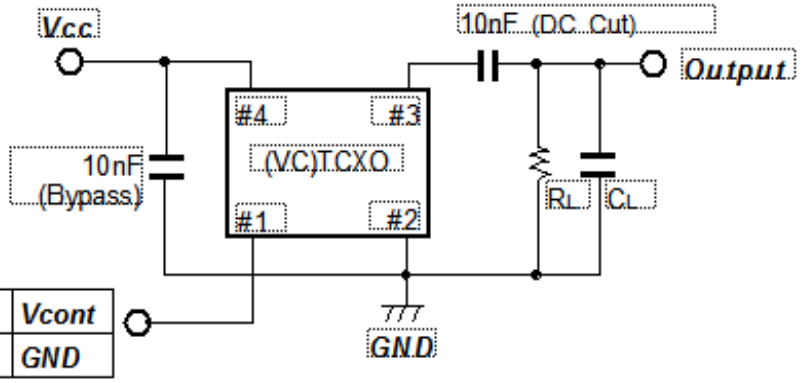
※ Recommended Land Pattern (Top View)



Bottom View



※ Measurement Circuit



VC-TCXO	Vcont
TCXO	GND

Note
Please connect a bypass capacitor closely to VCC Pad.
Load Capacitance (CL) includes probe and test board capacitance.

3. Marking Specification

CRYSTAL MARKING

19BS□□□

⬢ TCXO Marking: 19B S □□□
①~③ ④ ⑤~⑦

TCXO Marking		
Digit order	***Symbol***	***Explanation***
1~3	19B	Frequency
4	S	Serial Number(A~Z)
5~7	□□□	Production Year + Month + Day

1~3: Frequency Range + Frequency Serial Number(A~Z)					
Code	**Frequency Code [MHz]**	**Code**	**Frequency [MHz]**	**Code**	**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	**20B**	20.950000
16E	16.368000	**32A**	32.000000		
16F	16.369000	**32B**	32.768000		

5~7: Production Lot Code (Year+Month+Day)

Year	2011	2012	2013	…
Mark	1	2	3	…

Month	Jan.	Feb.	...	Oct.	Nov.	Dec.
Mark	**1**	**2**	**...**	**A**	**B**	**C**

Day	1	2	...	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mark	**1**	**2**	**...**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**