

(VC)TCXO Specification*Preliminary*

Customer :

1. Type : 2520 TCXO
2. Nominal Frequency : 26.000000MHz
3. Model Name : TOJ26000FB
4. Operating Condition

Supply Voltage (Vcc)	+1.7V ~ +3.3V (Supply voltage based on nominal +2.8V+/-5%)
Output Load	10kohm//10pF +/-10%
Control Voltage (Vcont)	n/a

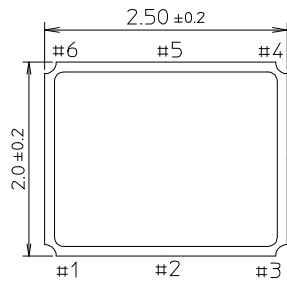
5. Electrical Characteristics

<i>Parameter</i>	<i>Value</i>	<i>Conditions</i>
Output Level	0.8Vp-p min.	Clipped sine wave (DC-coupled)
Current	1.5mA max.	
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-40°C to +85°C	
Frequency Stability		
vs. Temperature	+/-0.5ppm max.	-30°C to +85°C
	+/-3.0ppm max.	-40°C to -30°C
	Referenced to the mid point between min. and max. frequency	
vs. Supply Voltage	+/-0.1ppm max.	+2.8V +/-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
Frequency Slope	+/-0.1ppm/°C	-20 to +70°C 1 frequency reading every 2°C
Startup Time	2ms max.	more than 90% of final amplitude
Phase Noise	-130dBc/Hz max.	1KHz offset
Harmonics	-7dBc max.	

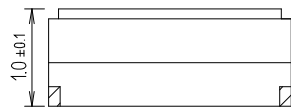
6. Outline

unit : mm

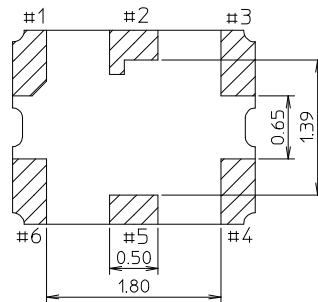
Top View



Side View

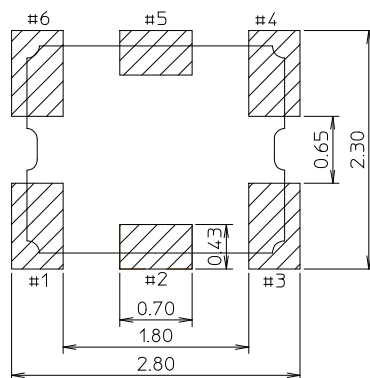


Bottom View



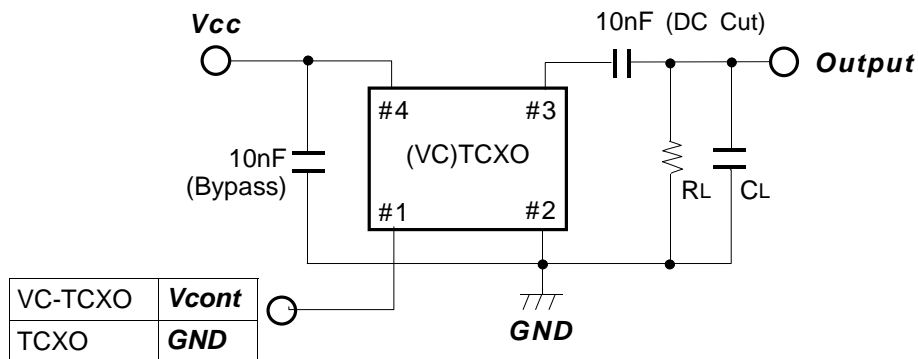
Pad No.	Connection	
	VC-TCXO	TCXO
#1	Vcont	GND
#3	GND	GND
#4	Output	Output
#6	Vcc	Vcc
#2, #5	N.C.	N.C.

Recommended Land Pattern



Please connect a bypass capacitor closely to Vcc Pad. (10nF recommended)

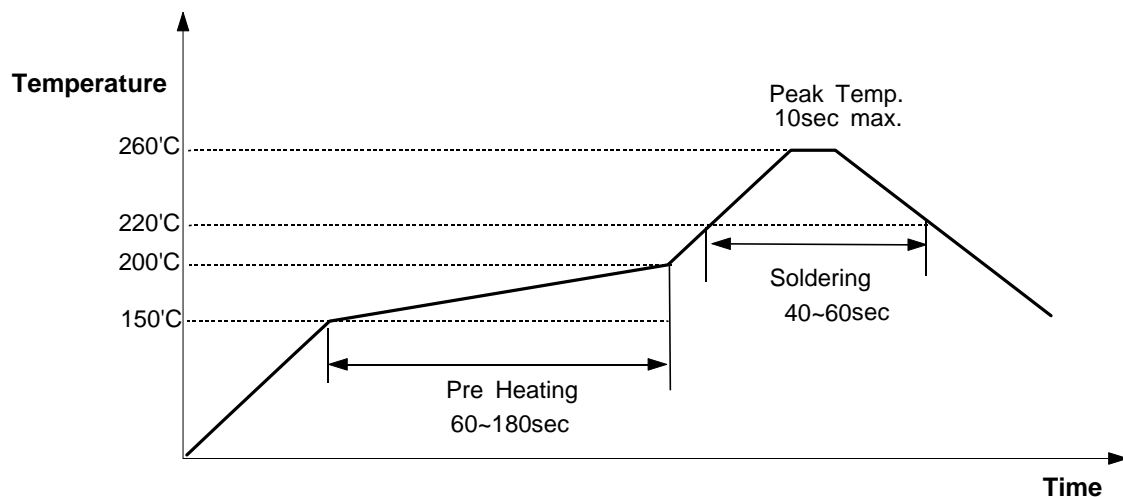
7. Measurement Circuit



Note

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

8. Reflow Profile



9. Caution to handle / Storage

1)Storage

Please keep products at the room temperature(+5~+35°C) and normal humidity(45~75%RH).

Recommend to use products within 6 months after manufacturing of TCXO.

Recommend to use products within 48 hours after opening the product box.

2)Please be cautious of static electricity and pin connection.

3)By over-pressure on the product, crack can be happened to product.

4)Please arrange TCXO far away from resin in case of the use of resin on the SET board.

The performance may be affected by resin because of crack on ceramic substrate.

5)Take care not to separate crystal unit and base substrate in case of the use of hot-gun for repair. Please always hold base substrate with tweezers, otherwise crystal unit may be separated.