

SPECIFICATIONS

TAITIEN SPEC_NO : 06172-W-038-3

Ver. : 01

TAITIEN Model : XAMCHCNDND

MARK

Side1:

Side2:

Procedure:LASER

1. GENERAL

- 1-1 Oscillation Mode : TF
- 1-2 Nominal Frequency : 0.032768 MHz
- 1-3 Load Capacitance(CL) : 12.5 pF
- 1-4 Storage Temperature : from -55 to +125 °C
- 1-5 Operating Temperature : from -20.0 to +70.0 °C

2. ELECTRICAL PERFORMANCE

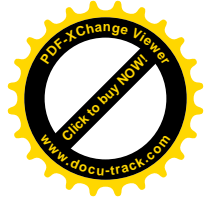
- 2-1 Frequency Tolerance : -20.0 / +20.0 ppm at 25°C +/-2°C
- 2-2 Temperature Characteristics : -0.04 ppm/°C²/max (+/-100 ppm)
- 2-3 Series Resistance(RS) : 40k Ohm max.
- 2-4 Load Resistance(RL) : Not specified
- 2-5 Shunt Capacitance(C0) : Not specified
- 2-6 Motion Capacitance(C1) : Not specified
- 2-7 C0/C1 Ratio : Not specified
- 2-8 Motion Inductance(L1) : Not specified
- 2-9 Q Factor : 0 K
- 2-10 Spurious Response : Not specified
- 2-11 Frequency Pullability : Not specified
- 2-12 Aging : Not specified
- 2-13 Insulation Resistance : 500MΩ at DC 100V
- 2-14 Drive Level Nominal : 1 uw
 - 2-14.1 Dependency Condition : Not specified
 - 2-14.2 Resistance Drift(DR) : Not specified
 - 2-14.3 Frequency Drift(DF) : Not specified
 - 2-14.4 DLD : Not specified

3. MECHANICAL

- 3-1 SMD Lead DRW : Not specified
- 3-2 Lead Length : Not specified
- 3-3 Lead Forming DRW# : Not specified
- 3-4 Insulation DRW# : Not specified
- 3-5 Top Pin : Not specified
- 3-6 Package Spec : Not specified

4. CUSTOMER SPECIAL REQUIREMENT

5. REMARK



泰藝電子有限公司

測 試 報 告

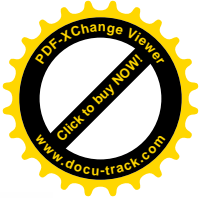
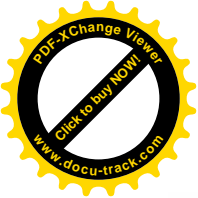
出貨批號 TW1-130400678-001

物料名稱:音叉石英晶體諧振器		規格 型號 : XA000003276806172038	
測試項目:頻差、阻抗		測試溫度 : T=25±3℃	
測試儀器 : CAN-LF網絡分析儀、CIM327A阻抗儀、ITC-5高清晰度計頻儀			
技術要求 : ±20PPM、 $R \leq 40K\Omega$ 、 $CL=12.5pF$			
樣 品 測 試 記 錄	編號	頻差(PPM)	阻抗(KΩ)
	1#	-5	16
	2#	-1	14
	3#	-5	15
	4#	0	13
	5#	-5	14
	6#		
	7#		
	8#		
	9#		
10#			
測試結果 : 合格			

測試員 : 李莹

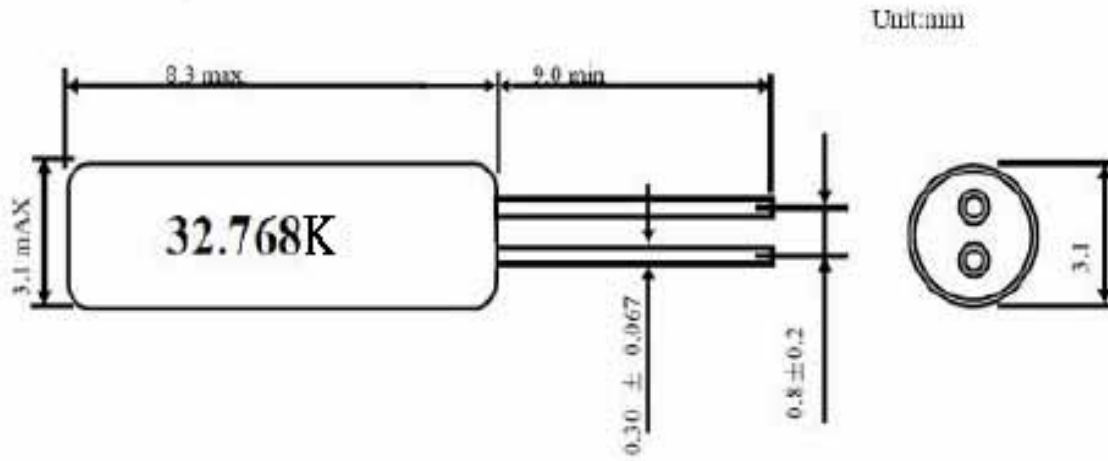
確認 :





■ PRODUCT DIMENSIONS

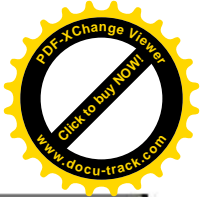
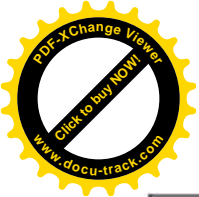
▷ DIMENSIONS



■ PRODUCT IDENTIFICATION (MARKING)

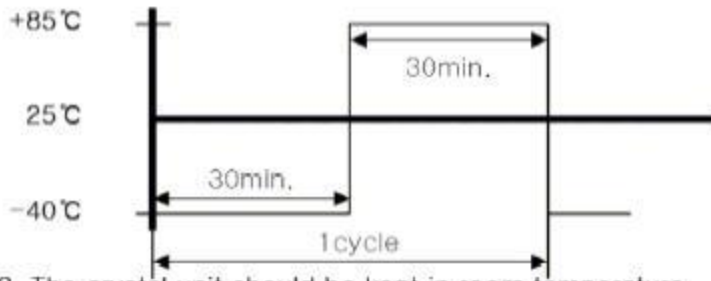
▷ PROCEDURE: LASER

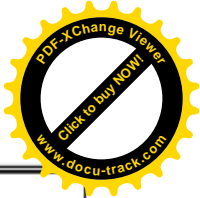
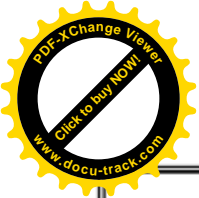




RELIABILITY TEST STANDARD

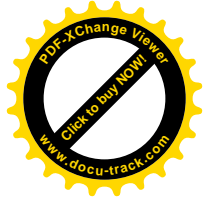
3.1 ENVIRONMENTAL

TEST ITEM	TESTING PROCEDURE & CONDITIONS	EVALUATION
1. THERMAL SHOCK TEST	<p>1. The test should be performed in accordance with the following condition for 10 cycle.</p>  <p>2. The crystal unit should be kept in room temperature for 1 hour then tested.</p>	The crystal unit should fulfill the specified requirements of the electrical characteristics and appearance.
2. HUMIDITY	<p>1. temperature : $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ RELATIVE HUMIDITY : 90~95% TEST PERIOD : 48 HOURS</p> <p>2. The crystal unit should be kept in room temperature for 1 hour then tested.</p>	The crystal unit should fulfill the specified requirements of the electrical characteristics and appearance.
3. COLD TEMPERATURE TEST	<p>1. TEMPERATURE : $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ TEST PERIOD : 2 HOURS</p> <p>2. The crystal unit should be kept in room temperature for 1 hour then tested.</p>	The crystal unit should fulfill the specified requirements of the electrical characteristics and appearance.
4. THERMAL TEST	<p>1. TEMPERATURE : $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ TEST PERIOD : 24 HOURS</p> <p>2. The crystal unit should be kept in room temperature for 1 hour then tested.</p>	The crystal unit should fulfill the specified requirements of the electrical characteristics and appearance.
5. RAPID CHANGE IN TEMPERATURE	<p>1. TEMPERATURE : $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ TEST PERIOD : 120 HOURS</p> <p>2. The crystal unit should be kept in room temperature for 1 hour then tested.</p>	The crystal unit should fulfill the specified requirements of the electrical characteristics and appearance.



3.2 MECHANICAL

TEST ITEM	TESTING PROCEDURE & CONDITIONS	EVALUATION
1. LEAD TENSILITY	1. FIX THE UNIT. 2. APPLY 2LB OF WEIGHT AXIS TO THE LEADS. 3. TIME : 5 SECONDS	SHOULD PASS SEALING AND VISUAL TEST
2. LEAD BENDING	1. ATTACH 1 LB OF WEIGHT TO EACH OF THE LEADS. 2. BENDING ANGLE : 90° (FROM THE NORMAL POSITION TO 45° OPPOSITE DIRECTION) 3. BENDING TIME : 3 SECONDS(EACH DIRECTION) 4. NUMBER OF BENDING : 2 TIMES	SHOULD PASS SEALING AND VISUAL TEST
3. LEADS SOLDERABILITY	1. DIP THE LEADS INTO FLUX(ROJIN METHANOL) FOR 5 SECONDS 2. DIP THE LEADS INTO 250±5°C 99% Sn DIPPING SOLUTION FOR 5 SECONDS.	THE DIPPED PART OF THE LEADS SHOULD HAVE 90~95% Sn COATING.
4. SOLDERING HEAT RESISTANCE TEST	1. PERFORM ELECTRICAL CHARACTERISTICS TEST BEFORE STARTING THIS PROCEDURE. 2. DIP THE LEADS INTO FLUX(ROJIN METHANOL) FOR 5 SECONDS. 3. DIP THE LEADS INTO 260±5°C 99% Sn DIPPING SOLUTION FOR 5 SECONDS. 4. TAKE THE UNIT OUT, STORE AT ROOM TEMPERATURE FOR 30 SECONDS THEN MEASURE THE ELCTRICAL CHARACTERISTICS.	SHOULD PASS SEALING AND VISUAL TEST
5. VIBRATION	1. PERFORM ELECTRICAL CHARACTERISTICS TEST BEFORE STARTING THIS PROCEDURE. 2. THE UNIT SHOULD BE FIXED ONTO A VIBRATING MACHINE AND THEN SHAKEN X.Y.Z DIRECTIONS. VIBRATING FREQUENCY : 10 ~ 55 Hz AMPLITUDE : 0.03 Inch FACTOR TIME : 1 MINUTES TESTING TIME : 30 MINUTES EACH FOR X, Y, Z DIRECTIONS	SHOULD PASS SEALING AND VISUAL TEST
6. DROP TEST	1. PERFORM ELECTRICAL CHARACTERISTICS TEST BEFORE STARTING THIS PROCEDURE. 2. FROM THE HEIGHT OF 500mm DROP THE UNIT 3 TIMES ONTO A HARD RUBBER SURFACE.	SHOULD PASS SEALING AND VISUAL TEST
7. LEAK TEST	USE Helium Leak Detector. Bombing PRESSURE : 5kg/cm ² Bombing TIME : 2 HOURS LEAK SHOULD BE LESS THAN 1E-8 atm.cc/sec.	GAS OR AIR SHOULD NOT BE DETECTED.
8. MARKING ERASE	SUBMERGE THE UNIT INTO IPA[ISOPROPYL ALCOHOL] SOLUTION FOR 10 MINUTES AND BRUSH THE MARKING 10 TIMES WITH A TOOTH BRUSH.	MARKING SHOULD NOT BE ERASED.



PACKAGING

4.1 PACKAGING BOX DIMENSION

INNER – BOX (2 TYPES)

FOR 50,000PCS

FOR 100,000PCS

OUT – BOX (2 TYPES)

FOR 5,000PCS

FOR 10,000PCS

4.2 PACKAGING METHOD

4.2.1 AS SHOWN IN PICTURE 1, INSERT 1000PCS OR 500PCS INTO A VYNYL BAG WITH A SILICA GEL AND THEN SEAL IT.

4.2.2 INSERT SHOCK ABSORBANT PAD ON THE BOTTOM OF THE INNER-BOX AND THEN INSERT THE CRYSTAL UNIT FILLED VYNYL BAGS CAREFULLY INTO THE BOX. INNER-BOX CAN ACCOMODATE 5000PCS OR 10000PCS. [PICTURE2]

4.2.3 AFTER CRYSTAL UNIT FILLED VYNYL BAGS ARE INSERTED INTO A BOX, INSERT SHOCK-ABSORBANT PAD ON TOP OF THEM. CLOSE THE LID/COVER. [PICTURE3]

4.2.4 ON THE INNER-BOX COVER, PASTE LABEL WHICH INDICATE CONTENTS OF THE BOX(FREQUENCY, LOAD CAPACITANCE, AND QUANTITY).

4.2.5 TO PREVENT INNER-BOX COVER OPENING DUE TO SHOCK, FASTEN THE COVER WITH A CLEAR TAPE AS SHOWN IN PICTURE4.

4.2.6 INSERT SHOCK ABSORBANT PAD ON THE BOTTOM OF THE OUT-BOX AND THEN INSERT THE INNER BOXES INTO THE OUTER BOX. OUT-BOX CAN ACCOMMODATE 50,000PCS OR 100,000PCS. [PICTURE5]

4.2.7 ON THE OUT-BOX SIDE, AS SHOWN IN PICTURE6, PASTE PRODUCT LABEL.

4.2.8 SEAL THE OUT-BOX TO PREVENT OPENING DUE TO EXTERNAL SHOCK. [PICTURE7]



PICTURE1



PICTURE2



PICTURE3



PICTURE4



PICTURE5



PICTURE6



PICTURE7