



## 納入仕様書

### Specification of Crystal Oscillator

XNCJH26M000TJEA2E2

決定年月日 October 6, 2016

Date

#### 1. 適用 Scope

当納入仕様書は、マイクロコンピュータ等のクロック発生回路に使用する水晶発振器について規定します。この用途以外にご使用の場合には事前に当社へご連絡ください。

This product specification is applied to the crystal Oscillator for time base oscillator in a microcomputer. Please contact us when using this product for any other applications than described in the above.

#### 2. 品番 及び 貴社関連事項 Part Number

- |     |                           |   |                    |
|-----|---------------------------|---|--------------------|
| 2-1 | 当社品番                      | : | XNCJH26M000TJEA2E2 |
|     | Murata Part Number        |   |                    |
| 2-2 | 貴社部品番号                    | : |                    |
|     | Customer's Part Number    |   |                    |
| 2-3 | 貴社仕様書番号                   | : |                    |
|     | Customer's Drawing Number |   |                    |

# SPECIFICATION FOR CRYSTAL OSCILLATOR

## KTD

◎	Parts Number	
◎	TEW Ordering Number	120-19484
◎	TEW Package Code	TTS18NSH-A7
◎	Center Frequency	26.000000 MHz
◎	Application	GPS
◎	RoHS compliant	Applied
◎	Packing form	Tape and Reel
◎	Other	No attached test data

CUSTOMER SIGNATURE

DATE

(1)Tokyo Denpa Co., Ltd. requires one copy returned with signature and title of authorized individual that signifies acceptance of the attached specifications.

(2)Any orders received and accepted by Tokyo Denpa Co., Ltd. prior to return of signed copy of specification will be produced per these specifications.

(3)Any changes to these specifications must be agreed upon in writing prior to acceptance by Tokyo Denpa Co., Ltd. for any orders.

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## SPECIFICATION FOR CRYSTAL OSCILLATOR

This specification is applied for the TCXO. MOUNTING TYPE S.M.D (for IR Reflow)

### 1. Absolute maximum value

	Parameter	Symbol	Value			Unit	Note
			Min.	Typ.	Max.		
1	Supply Voltage	V <sub>cc</sub>	-0.6	---	+6.0	V	
2	Storage Temperature Range	T <sub>STG</sub>	-40	---	+85	°C	

### 2. Operating range

	Parameter	Symbol	Value			Unit	Note
			Min.	Typ.	Max.		
1	Supply Voltage	V <sub>cc</sub>	+1.71	+1.8	+1.89	V	DC+1.8V±5%
2	Operating temperature range	T <sub>use</sub>	-30	---	+85	°C	
3	Load impedance	Load_R	9	10	11	kΩ	
	Load capacitance	Load_C	9	10	11	pF	

### 3. Electrical specification

	Parameter	Test Condition	Value			Unit	Note
			Min.	Typ.	Max.		
1	Current Consumption		---	---	2.0	mA	
2	Output Level	Load R/C = 10kΩ/10pF	0.8	---	---	Vp-p	1
3	Frequency Stability						
	1. Frequency Tolerance	(25±2°C)	---	---	±1.0	ppm	2
	2. Frequency - Temperature (referred to the value 25±2°C)	T <sub>use</sub> = -30°C to +85°C	---	---	±0.5	ppm	3
	3. Frequency - Voltage Coefficient	V <sub>cc</sub> =+1.8V-0.09V/+0.09V	---	---	±0.2	ppm	
	4. Frequency - Load Coefficient	Load = (10kΩ/10pF)±10%	---	---	±0.2	ppm	
	5. Frequency - Aging	1 year, (25±2°C)	---	---	±1.0	ppm/year	
	6. Frequency - After Reflow-soldering	2times	---	---	±1.0	ppm	4

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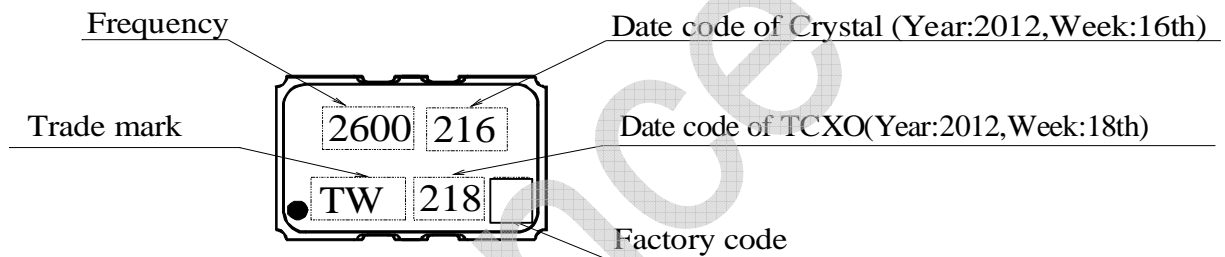
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## SPECIFICATION FOR CRYSTAL OSCILLATOR

**Note**

- 1 Output Wave : Clipped Sine wave (DC coupling)  
DC-cut capacitor of output is not put in TCXO.  
Please add DC-cut capacitor(1,000pF) in oscillators output line.
- 2 Reference : Nominal Frequency
- 3 Reference : Frequency
- 4 Reference : 7.Reflow-Soldering Profile(Please refer to 5/8 page)

**4. Marking (Product marking)**



Factory code: 1 character

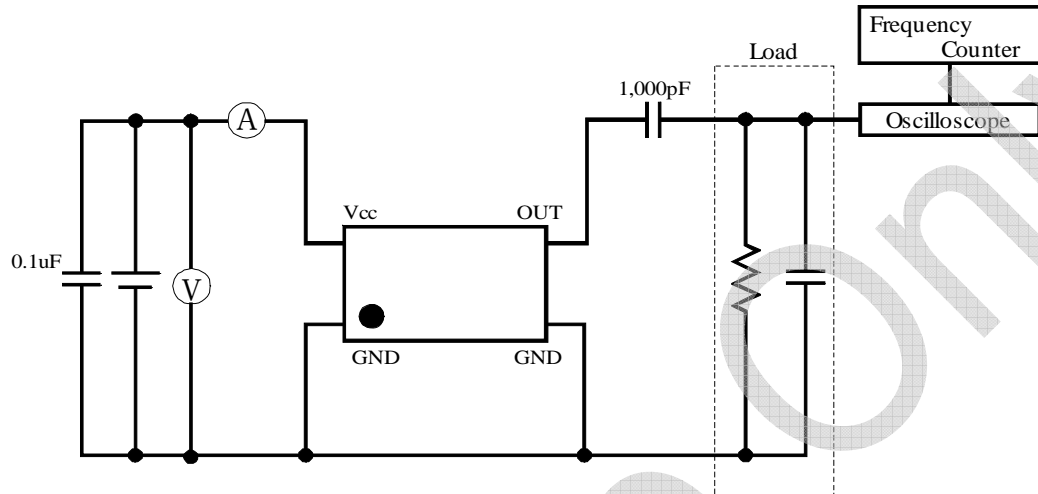
**5. Requirement of detaching TCXO from circuit board.**

When detaching TCXO from circuit board, the heat has to be reached equally on each terminal pad, and strong shock must not be added on TCXO.

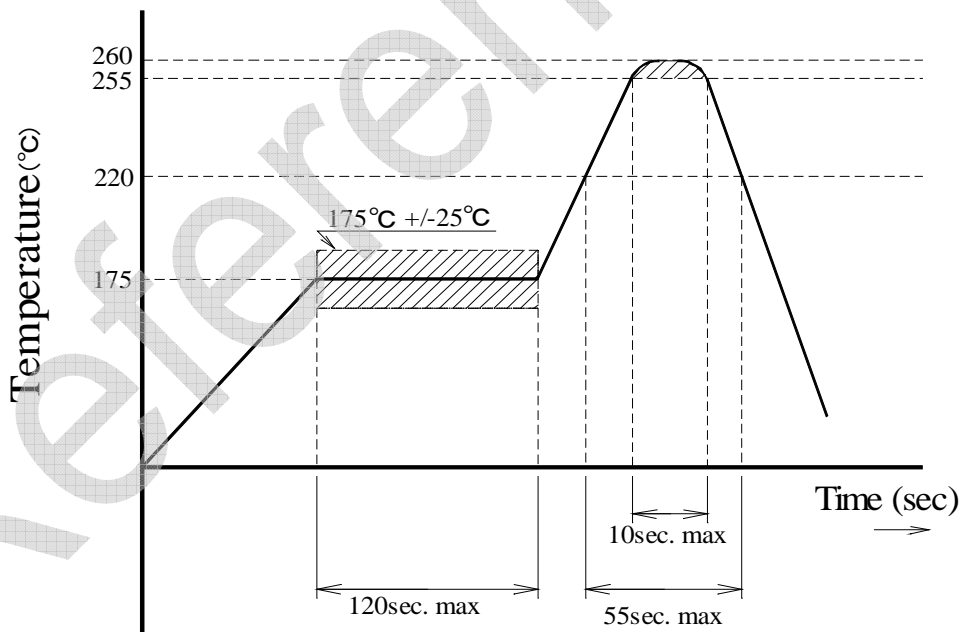
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## 6. Frequency measurement circuit



## 7. Reflow-soldering profile

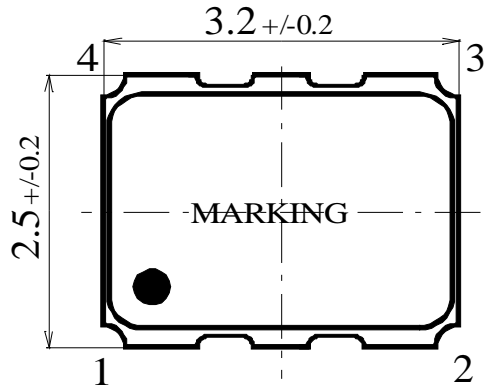


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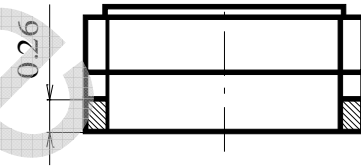
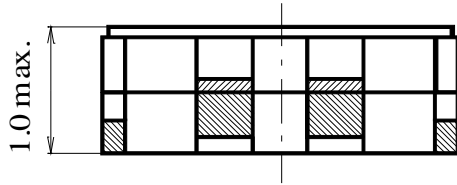
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## 8. Dimensions

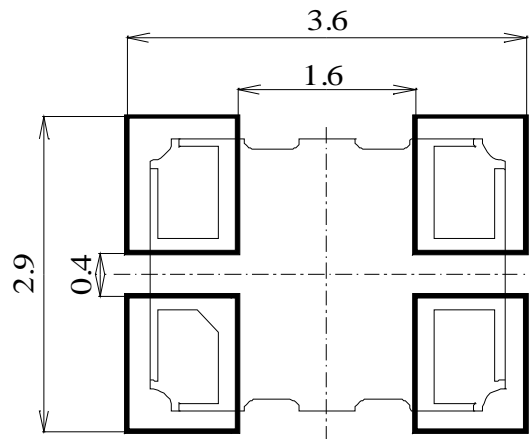
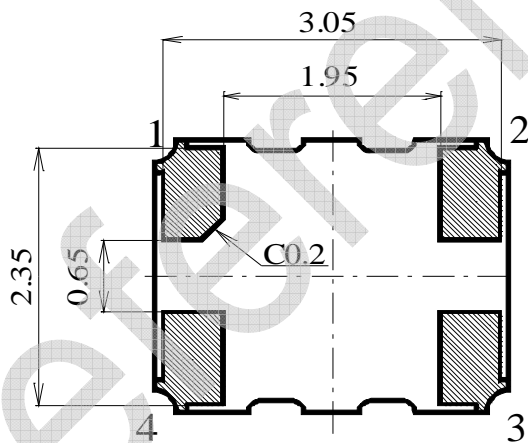


### Pin Connections

1. GND
2. GND
3. OUTPUT
4. Vcc



### Recommended land pattern (Top View)



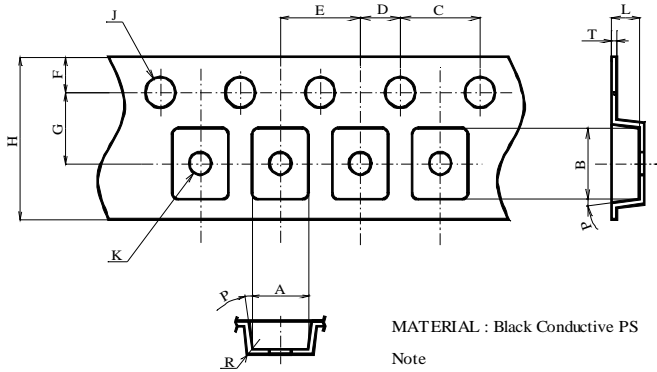
unit : mm

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## 9. Tape & Reel specifications 9.1 Embossed Tape



MATERIAL : Black Conductive PS

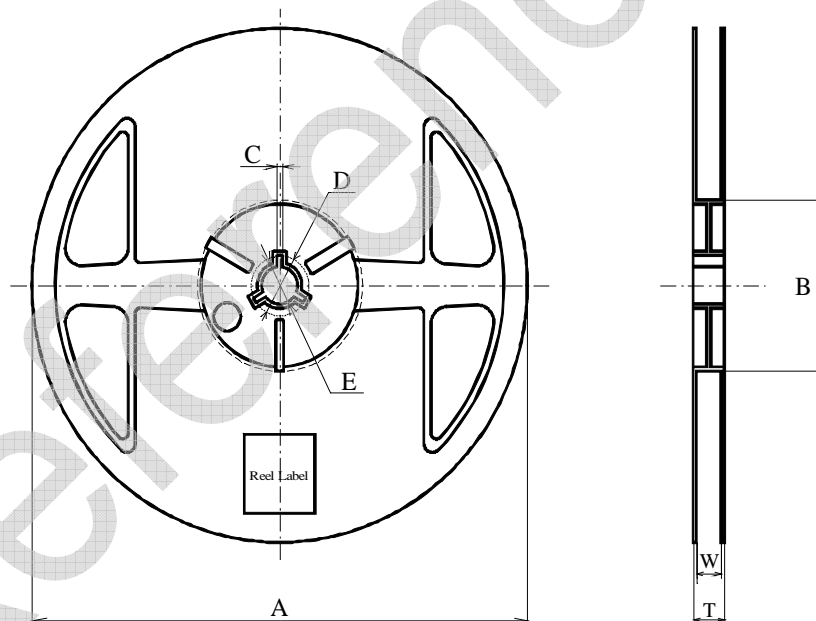
Note

1) Cumulative tolerance of 10 pitches of the sprocket hole is +/-0.2mm

Symbol	A	B	C	D	E	F	G
Dimension	2.8+/-0.1	3.5+/-0.1	4.0+/-0.1	2.0+/-0.05	4.0+/-0.1	1.75+/-0.1	3.5+/-0.05
Symbol	H	J	K	L	P	T	R
Dimension	8.0+/-0.3	$\Phi$ 1.5+0.1/-0	$\Phi$ 1.1+/-0.1	1.4+/-0.1	3' max	0.25+/-0.05	R0.3 max

unit : mm

## 9.2 Reel



Symbol	A	B	C	D	E	W	T
Dimension	$\Phi$ 180+0/-3	$\Phi$ 60+1/-0	2.0+/-0.5	$\Phi$ 21.0+/-0.8	$\Phi$ 13+/-0.2	9.0+/-0.3	11.4+/-1.0

unit : mm

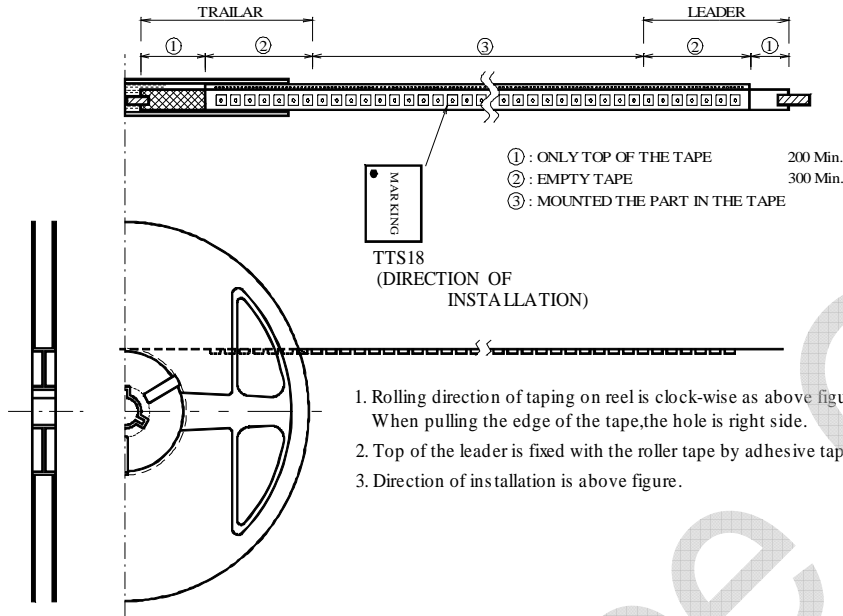
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## 9.3 Taping Specification



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