



2.0×1.6mm



**AEC-Q100/200** **RoHS Compliant**  
\*AEC-Q100 qualified (Option)

### Features

- Miniature SMD type (2.0×1.6×0.8mm)
- Freq. temp. characteristics:  
: ±2.0×10<sup>-6</sup>/ -30 to +85°C  
: ±0.5×10<sup>-6</sup>/ -30 to +85°C (for GNSS)
- 1.68 to 3.63V available
- Reflow compatible
- Operating Temp. -40 to +105°C (Option)
- Disable Function (Option)

### Applications

- Mobile Communications, W-LAN
- Low power radio communications
- GNSS Unit

### How to Order

KT2016K 26000 □ □ □ □ □ xx  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

#### ①Series

#### ②Output Frequency

#### ③Freq. Temp. Chrst.

A	±0.5×10 <sup>-6</sup>
B	±1.0×10 <sup>-6</sup>
C	±1.5×10 <sup>-6</sup>
D	±2.0×10 <sup>-6</sup>

#### ④Lower Operating Temp.

C	-30°C
E	-20°C
G	-10°C

#### ⑤Upper Operating Temp.

W	+85°C
V	+80°C
U	+75°C

#### ⑥Supply Voltage

18	1.8V	28	2.8V
30	3.0V	33	3.3V

#### ⑦Voltage Control Function

T	TCXO
Spec. Code*	VCTCXO

\*Please contact us for Spec. Code.

#### ⑧Individual Specification

Packaging (Tape & Reel 15000 pcs./ reel)

### Specifications

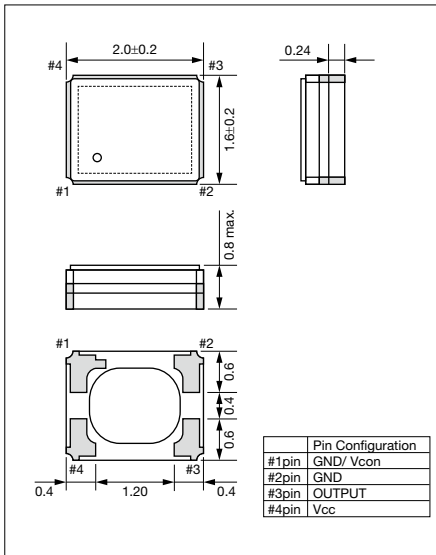
Item	Symbol	Conditions	Min.	Max.	Unit
Output Frequency Range	f <sub>o</sub>	Standard Output Frequency: 19.2 / 26.0 / 32.0 / 38.4 / 48.0 / 52.0	19.2	52	MHz
Frequency Tolerance	f <sub>tol</sub>	vs Temperature	-0.5/ -2	+0.5/ +2	×10 <sup>-6</sup>
		vs Load	-0.2	+0.2	
		vs Voltage	-0.2	+0.2	
Frequency Aging	f <sub>age</sub>	Per Year	-1	+1	×10 <sup>-6</sup>
Storage Temperature Range	T <sub>stg</sub>		-40	+85	°C
Operating Temperature Range	T <sub>use</sub>		-30	+85	°C
Voltage Control Range	f <sub>cont</sub>	Positive	±8	±15	×10 <sup>-6</sup>
Supply Voltage	V <sub>cc</sub>		1.68	3.63	V
Output Level	V <sub>pp</sub>	Clipped Sine*, Load: 10k ohm / / 10pF	0.8	—	Vp-p
Current Consumption	I <sub>cc</sub>		—	2	mA
Harmonics	—		—	-5	dBc

\*: A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor (≥1nF) to the line-out terminal of the oscillator.

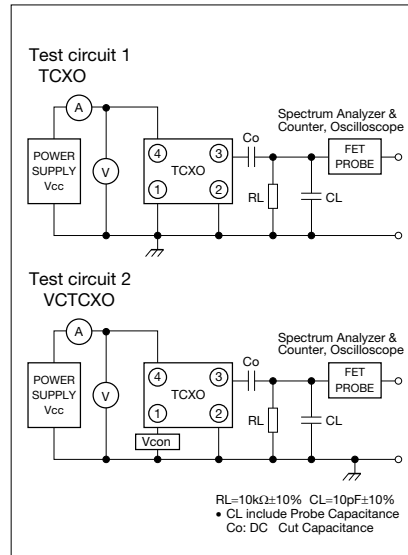
\* Please contact us for other specifications.

### Dimensions

(Unit: mm)

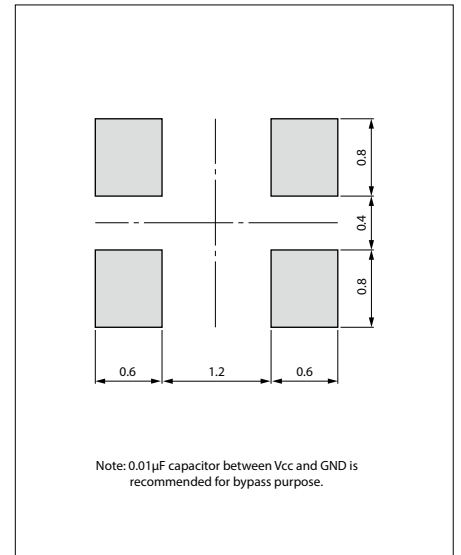


### Test Circuit



### Recommended Land Pattern

(Unit: mm)



# Temperature Compensated Crystal Oscillators (TCXO) Surface Mount Type TCXO KT2016K Series (Low Phase Noise, With Disable Function)

Find TCXO Here



2.0×1.6mm



AEC-Q200 RoHS Compliant

## Features

- Ultra-miniature SMD type (2.0×1.6×0.8mm)
- Low Phase Noise : -164dBc/ Hz@100kHz offset, 52MHz
- With Disable Function
- Freq. temp. characteristics : ±2.0×10<sup>-6</sup>/ -30 to +85°C : ±0.5×10<sup>-6</sup>/ -30 to +85°C (for GNSS)
- 1.68 to 3.63V drive available
- Reflow compatible
- Operating Temp. -40 to +105°C (Option)

## Applications

- Mobile communications, Wireless modules
- GNSS Unit
- Wi-Fi 6 (IEEE802.11ax)
- Networking equipments

\*Wi-Fi® is a registered trademark of Wi-Fi Alliance.

## How to Order

KT2016K 26000 □ □ □ □ N x G  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

### ①Series

KT2016K 2016 Size

### ②Output Frequency

### ③Freq. Temp. Chrst.

A	±0.5×10 <sup>-6</sup>
B	±1.0×10 <sup>-6</sup>
C	±1.5×10 <sup>-6</sup>
D	±2.0×10 <sup>-6</sup>

### ④Lower Operating Temp.

C	-30°C
E	-20°C
G	-10°C

### ⑤Upper Operating Temp.

W	+85°C
V	+80°C
U	+75°C

### ⑥Supply Voltage

18	1.8V	28	2.8V
30	3.0V	33	3.3V

### ⑦Disable Function

N With Disable Function

### ⑧Individual Specification

### ⑨Low Phase Noise Type

F/G Low Phase Noise

Packaging (Tape & Reel 18000 pcs./ reel)

## Specifications

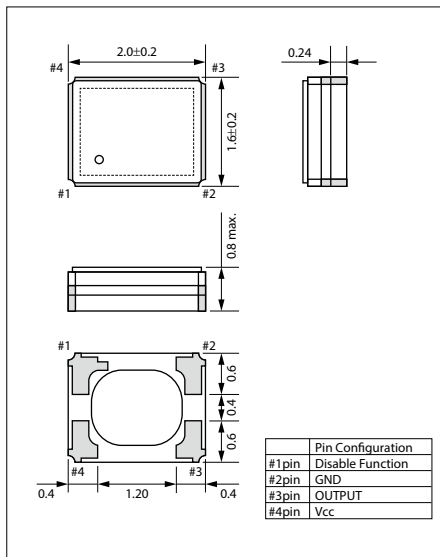
Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	f <sub>o</sub>	Standard Output Frequency: 19.2 / 26.0 / 38.4 / 48.0 / 52.0 / 60.0	19.2	60.0	MHz
Frequency Tolerance	f <sub>tol</sub>	vs Temperature	-0.5/ -2	+0.5/ +2	×10 <sup>-6</sup>
		vs Load	-0.1	+0.1	
		vs Voltage	-0.1	+0.1	
Frequency Aging	f <sub>age</sub>	Per Year	-1	+1	×10 <sup>-6</sup>
Storage Temperature Range	T <sub>stg</sub>		-40	+85	°C
Operating Temperature Range	T <sub>use</sub>		-30	+85	°C
Supply Voltage	V <sub>cc</sub>		1.68	3.63	V
Output Level	V <sub>pp</sub>	Clipped Sine*, Load: 10k ohm // 10pF	0.8	—	V <sub>p-p</sub>
Current Consumption	I <sub>cc</sub>		—	5.6	mA
Harmonics	—		—	-5	dBc

\* : A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor (≥1nF) to the line-out terminal of the oscillator.

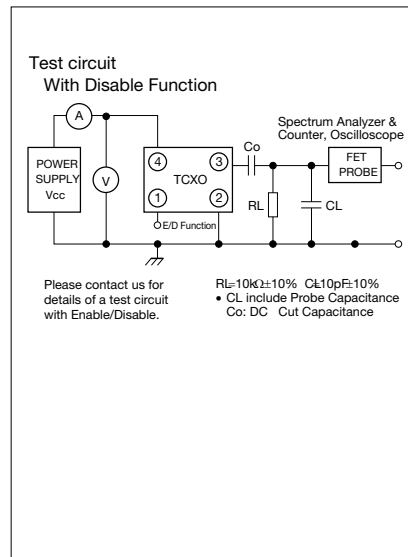
\* Please contact us for other specifications.

## Dimensions

(Unit: mm)



## Test Circuit



## Recommended Land Pattern

(Unit: mm)

