

# Temperature Compensated Crystal Oscillators (TCXO, VCTCXO) Surface Mount Type TCXO (LSI Type) KT2520 Series



2.5×2.0mm



RoHS Compliant

## Features

- Miniature SMD type (2.5×2.0×0.8mm)
- Freq. temp. characteristics.  
:  $\pm 2.0 \times 10^{-6}/-30$  to  $+85^\circ\text{C}$   
:  $\pm 0.5 \times 10^{-6}/-30$  to  $+85^\circ\text{C}$  (for GPS)
- 1.68 to 3.63V drive available
- Reflow compatible
- Operating Temp.  $-40$  to  $+105^\circ\text{C}$  (Option)
- Ultra low supply current 800 $\mu\text{A}$  typ.  
Conditions of 26MHz and 1.0Vp-p (Option)
- AEC-Q200 qualified
- AEC-Q100 qualified (Option)

## Applications

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

## How to Order

KT2520K 26000 A C W 18 T xx  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series

② Output Frequency

③ Freq. Temp. Chrst.

A	$\pm 0.5 \times 10^{-6}$
B	$\pm 1.0 \times 10^{-6}$
C	$\pm 1.5 \times 10^{-6}$
D	$\pm 2.0 \times 10^{-6}$

④ Lower Operating Temp.

C	$-30^\circ\text{C}$
E	$-20^\circ\text{C}$
G	$-10^\circ\text{C}$

⑤ Upper Operating Temp.

W	$+85^\circ\text{C}$
V	$+80^\circ\text{C}$
U	$+75^\circ\text{C}$

⑥ Supply Voltage

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

⑦ Voltage Control Function

T	TCXO
Other*	VCTCXO

\* Customer Spec.

⑧ Option Code

Packaging (Tape & Reel 12000 pcs./ reel)

## Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	fo		10	52	MHz
Frequency Tolerance	f <sub>tol</sub>	vs Temperature	-0.5/ -2	+0.5/ +2	$\times 10^{-6}$
		vs Load	-0.2	+0.2	
		vs Voltage	-0.2	+0.2	
Frequency Aging	f <sub>age</sub>	Per Year	-1	+1	$\times 10^{-6}$
Storage Temperature Range	T <sub>stg</sub>		-40	+85	$^\circ\text{C}$
Operating Temperature Range	T <sub>use</sub>		-30	+85	$^\circ\text{C}$
Voltage Control Range	f <sub>cont</sub>	Positive	$\pm 8$	$\pm 15$	$\times 10^{-6}$
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 ( $\geq 1\text{nF}$ ) to the line-out terminal of the oscillator.

\* Please contact us for other specifications.

## Dimensions

(Unit: mm)



## Test Circuit



## Recommended Land Pattern

(Unit: mm)

