

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



2.5x2.0mm



RoHS Compliant

## Features

- Miniature SMD type (2.5x2.0x0.8mm)
- AFC function available
- Freq. temp. characteristics:  $\pm 2.0 \times 10^{-6}/-30$  to  $+85^\circ\text{C}$
- 1.68 to 3.6V drive available
- Reflow compatible

## Applications

- 3G (CDMA, W-CDMA, TD-SCDMA), GPRS, GSM, W-LAN, WiMAX

## How to Order

KT2520F 26000 D C W 28 T xx  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series	⑥ Supply Voltage
② Output Frequency	<b>28</b> 2.8V <b>30</b> 3.0V
③ Freq. Temp. Chrst.	⑦ Voltage Control Range
<b>B</b> $\pm 1.0 \times 10^{-6}$	<b>T</b> TCXO
<b>C</b> $\pm 1.5 \times 10^{-6}$	<b>Other*</b> VCTCXO
<b>D</b> $\pm 2.0 \times 10^{-6}$	* Customer Spec.
④ Lower Operating Temp.	⑧ Option Code
<b>C</b> $-30^\circ\text{C}$	
<b>E</b> $-20^\circ\text{C}$	
<b>G</b> $-10^\circ\text{C}$	
⑤ Upper Operating Temp.	
<b>W</b> $+85^\circ\text{C}$	
<b>V</b> $+80^\circ\text{C}$	
<b>U</b> $+75^\circ\text{C}$	

Packaging (Tape & Reel 3000 pcs./ reel)

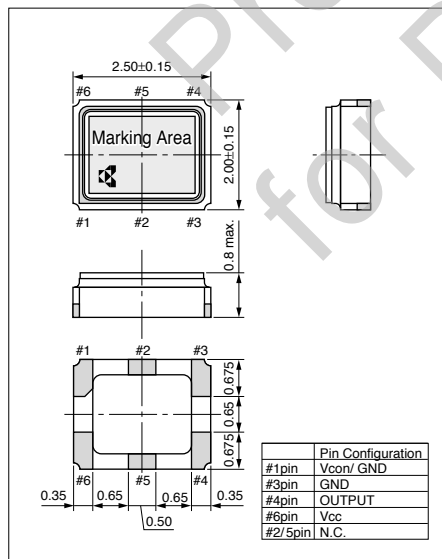
## Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	fo	Standard Frequency: 13, 19.2, 26, 38.4, 52	13	52	MHz
Frequency Tolerance	f <sub>tol</sub>	vs Temperature	-2	+2	$\times 10^{-6}$
		vs Load	-0.1	+0.1	
Frequency Aging	f <sub>age</sub>	vs Voltage	-0.2	+0.2	$\times 10^{-6}$
		Per Year	-1	+1	
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	3.6	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

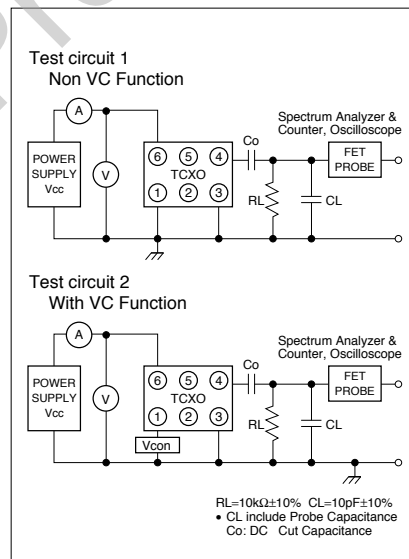
\* : A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor ( $\geq 1\text{nF}$ ) to the line-out terminal of the oscillator.

## Dimensions

(Unit: mm)



## Test Circuit



## Recommended Land Pattern

(Unit: mm)

