

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



2.5×2.0mm



RoHS Compliant

## Features

- Miniature SMD type (2.5×2.0×0.8mm)
- 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	28 2.8V 30 3.0V
③ Freq. Temp. Chrst.	⑦ Voltage Control Range
B $\pm 1.0 \times 10^{-6}$	T TCXO
C $\pm 1.5 \times 10^{-6}$	Other* VCTCXO
D $\pm 2.0 \times 10^{-6}$	* Customer Spec.
④ Lower Operating Temp.	⑧ Option Code
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 $+75^\circ\text{C}$	

Packaging (Tape & Reel 3000 pcs./ reel)

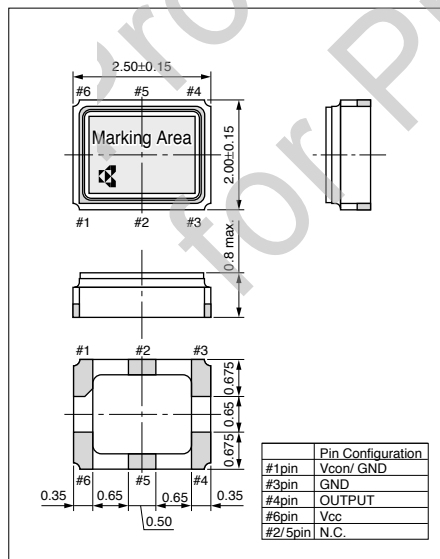
## Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	$f_o$	Standard Frequency: 13, 19.2, 26, 38.4, 52	13	52	MHz
Frequency Tolerance	$f_{tol}$	vs Temperature	-2	+2	$\times 10^{-6}$
		vs Load	-0.1	+0.1	
		vs Voltage	-0.2	+0.2	
Frequency Aging	$f_{age}$	Per Year	-1	+1	$\times 10^{-6}$
Storage Temperature Range	$T_{stg}$		-40	+85	$^\circ\text{C}$
Operating Temperature Range	$T_{use}$		-30	+85	$^\circ\text{C}$
Voltage Control Range	$f_{cont}$	Positive	$\pm 8$	$\pm 15$	$\times 10^{-6}$
Supply Voltage	$V_{CC}$		1.68	3.6	V
Output Level	$V_{pp}$	Clipped Sine*, Load: 10k ohm // 10pF	0.8	—	Vp-p
Current Consumption	$I_{CC}$		—	2	mA
Harmonics	—		—	-5	dBc

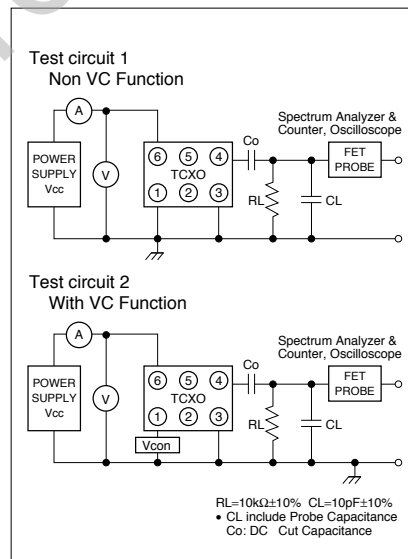
\* : A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor ( $\geq 1\text{nF}$ ) to the line-out terminal of the oscillator.

## Dimensions

(Unit: mm)



## Test Circuit



## Recommended Land Pattern

(Unit: mm)

