



# HCMOS TCXO STO-2520B

## Applications

- Cellular and Network Equipment

## Features

- HCMOS output with Tri-state function
- Ceramic package, Dimensions (2.5 × 2.0 × 0.9)
- High stability ±2.5ppm / -30°C ~ +75°C
- Low current consumption
- Low phase noise, Low jitter

## Specifications



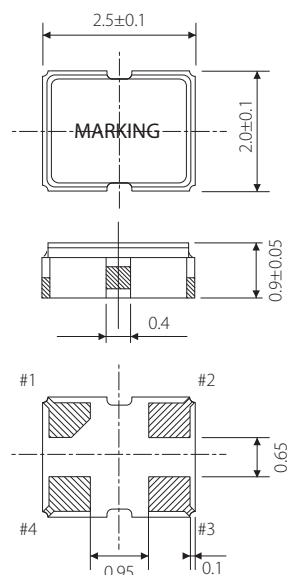
Model	STO-2520B	
Frequency range	3.200~55.000 MHz	
Nominal frequency (MHz)	5, 10, 12, 16, 20, 24, 32, 40, 44	
Storage temperature range	-40~ +125 °C	
Operating temperature range	-30~ +75 °C	
Frequency stability	Tolerance at 25°C	±2.0 × 10 <sup>-6</sup> (Sixty minutes after reflow)
	Temperature (+25°C basis)	±2.5 × 10 <sup>-6</sup> / -30~+75°C
	Supply voltage change	±0.2 × 10 <sup>-6</sup> / Vdd ± 5%
	Load change	±0.2 × 10 <sup>-6</sup> / ZL ± 10%
Aging	±1.0 × 10 <sup>-6</sup> / year at +25°C	
Power supply voltage (Vdd)	+2.5V, +2.8V, +3.3V DC ±10%	
Current consumption	*note / 10uA max (Standby)	
Output level	C-MOS	
Load	15pF	
Output voltage level	V <sub>OL</sub> :10%Vdd max. / V <sub>OH</sub> :90%Vdd min.	
Rise & Fall time	5ns max. / 10%Vdd - 90%Vdd	
Duty cycle	45% ~ 55% at 1/2Vdd	
Phase Noise / Jitter	-145dBc / Hz Typ. at 10kHz offset / 1σ 3ps typ.	
Tri-state Function	#1: Floating. or "H" → Output enable / #1:"L" → Output disable (Hi-Z)	

\*Reference / I<sub>dd</sub> Spec (mA max.)

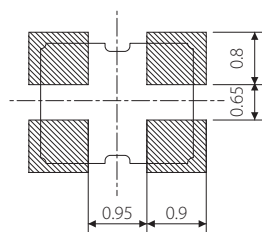
Frequency	4~10MHz	~20MHz	~30MHz	~40MHz	~54MHz
2.5V	3.1	3.7	4.2	4.6	5.5
2.8V	3.4	4.1	4.7	5.2	6.0
3.3V	4.0	4.8	5.5	6.0	7.0

Package quantity: 1,000pcs max./Reel.

## Outline and Dimensions [unit:mm]



Example of a Terminal Land Pattern



Terminal	Connection
#1	Tri-state
#2	GND
#3	OUTPUT
#4	Vdd

Tri-state Function

Tri-state Pin	Output
High or Floating	Active
Low	Hi-impedance