

# TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR

## STO-2520, STV-2520

### Applications

- Cellular / PHS / GPS  
Communication Equipment

### Features

- Ultra thin / Dimensions(2.5 X 2.0 X 0.8)
- Seam sealed
- Low phase noise / Low power consumption
- High Stability  $\pm 0.5\text{ppm}$  /  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

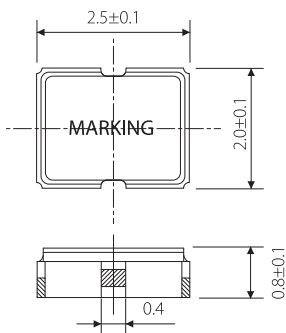
### Specifications



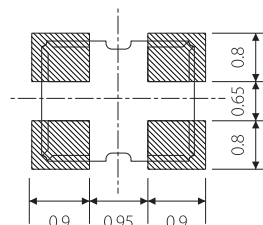
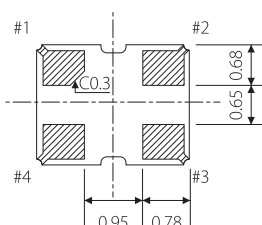
Model	STO-2520	STV-2520	
Frequency range	16~52 MHz		
Nominal frequency(MHz)	16.369, 16.384, 19.2, 26		
Frequency stability	Tolerance at 25°C	$\pm 2.0 \times 10^{-6}$ (Sixty minutes after reflow)	
	Temperature (Ref. to 25°C)	$\pm 0.5 \times 10^{-6}$ / $-40 \sim 85^{\circ}\text{C}$	
	Supply voltage change	$\pm 0.2 \times 10^{-6}$ / $V_{dd} \pm 5\%$	
	Load change	$\pm 0.2 \times 10^{-6}$ / $Z_L \pm 10\%$	
Aging (at 25°C)	$\pm 1.0 \times 10^{-6}$ / First year		
Storage temperature range	$-40 \sim 85^{\circ}\text{C}$		
Power supply voltage (Vcc)	$\pm 1.8 \sim +3.3\text{V DC} \pm 5\%$		
Current consumption	1.5mA max.(~26MHz), 2.0mA max.(~32MHz), 2.5mA max.(~52MHz)		
Output	Load (ZL)	10kΩ //10 pF	
	Voltage	0.8V p-p min.	
	Waveform	Clipped Sine Wave (DC-coupled output)	
External control function	Frequency tuning range	—	$\pm 8.0 \times 10^{-6}$ min. (Positive)
	External control voltage	—	$+1.5\text{V} \pm 1.0\text{V DC} / +0.9\text{V} \pm 0.9\text{V DC}$
	Input impedance(Zvin)	—	500kΩ min. (770kΩ typ.)
Phase noise	-135dBc typ. at 1kHz offset		

Package quantity: 3000pcs max./Reel.

### Outline and Dimensions[unit:mm]



Example of a Terminal Land Pattern



Terminal	Connection	
	TCXO	VC-TCXO
#1	GND	Vcont
#2	GND	
#3	OUTPUT	
#4	Vdd	