

# TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR

## STO-2016, STV-2016



### Applications

- GPS / LTE / Femtocell

### Features

- Ultra-thin / Dimensions (2.0×1.6×0.8)
- Seam sealed
- Low phase noise / Low power consumption
- High stability  $\pm 0.5\text{ppm} / -40\sim+85^{\circ}\text{C}$

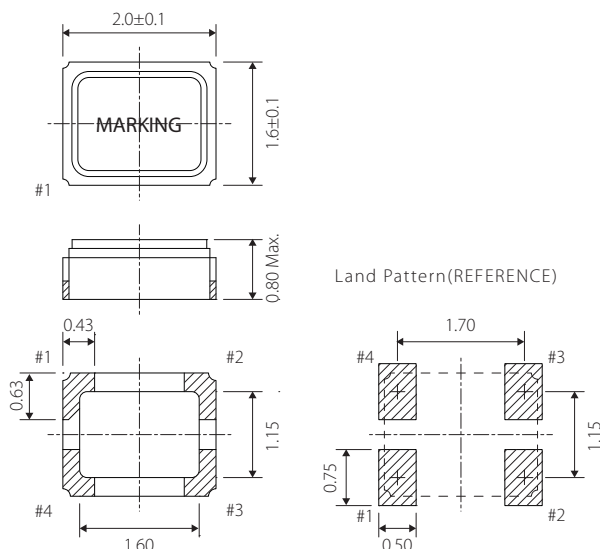
### Specifications



Model	STO-2016	STV-2016	
Frequency range	16~52MHz		
Nominal frequency (MHz)	19.2, 26, 38.4, 52		
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	$\pm 0.2 \times 10^{-6} / \text{Vdd} \pm 5\%$	
	Load change	$\pm 0.2 \times 10^{-6} / \text{ZL} \pm 10\%$	
Aging (at 25°C)	$\pm 1.0 \times 10^{-6} / \text{year at } +25^{\circ}\text{C}$		
Storage temperature range	-40~+85°C		
Power supply voltage (Vcc)	+1.8V~+3.3V DC $\pm 5\%$		
Current consumption	1.5mA max. (~26MHz), 2.0mA max. (~32MHz), 2.5mA max. (~52MHz)		
Output	Load (ZL)	10k $\Omega$ //10pF	
	Voltage	0.8V p-p min.	
	Waveform	Clipped Sine Wave (DC-coupled output)	
External controlfunction	Frequency tuning range	-	$\pm 8.0 \times 10^{-6}$ min. (Positive)
	External control voltage	-	+1.5V $\pm 1.0\text{V}$ DC / +0.9V $\pm 0.9\text{V}$ DC
	Input impedance (Zvin)	-	500k $\Omega$ min. (770k $\Omega$ typ.)
Phase noise	-135dBc typ. at 1kHz offset		

Package quantity: 3,000pcs max./Reel.

### Outline and Dimensions [unit:mm]



Terminal	Connection	
	STO-2016	STV-2016
#1	GND	VC
#2	GND	GND
#3	OUTPUT	OUTPUT
#4	Vcc	Vcc