

TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR

CSTO-2016, CSTV-2016



Applications

- GPS / WiMAX / LTE / Wifi
- Communication Equipment
- Automotive

Features

- Ultra-thin / Dimensions (2.0×1.6×0.8)
- Sealed
- Low phase noise / Low power consumption
- High stability $\pm 0.5\text{ppm} / -40 \sim +105^\circ\text{C}$
- Compliant products with AEC-Q100

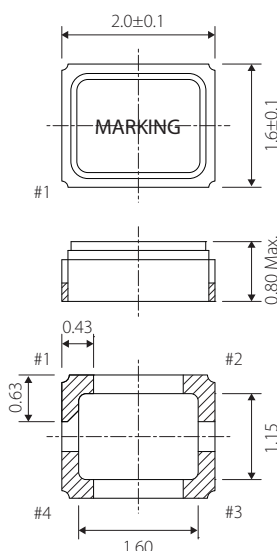
Specifications



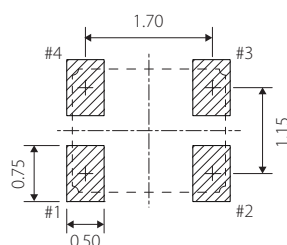
Model		CSTO-2016	CSTV-2016
Frequency range		16.000~52.000MHz	
Nominal frequency (MHz)		16.369, 16.384, 19.2, 26, 38.4, 52	
Frequency stability	Tolerance at 25°C	$\pm 2.0 \times 10^{-6}$ (Sixty minutes after reflo)	
	Temperature (Ref.to+25°C)	$\pm 0.5 \times 10^{-6} / -40 \sim +105^\circ\text{C}$	
	Supply 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		$\pm 1.0 \times 10^{-6} / \text{year at } +25^\circ\text{C}$	
Storage temperature range		$-40 \sim +105^\circ\text{C}$	
Power supply voltage (Vdd)		$+1.8\text{V} \sim +3.3\text{V} \pm 5\%$	
Current consumption		1.5mA max. ($\sim 26\text{MHz}$), 2.0mA max.($\sim 32\text{MHz}$), 2.5mA max.($\sim 52\text{MHz}$)	
Output	Load (ZL)	10K Ω // 10pF	
	Voltage	0.8Vp-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	-	$+1.5\text{V} \pm 1.0\text{V DC} / +0.9\text{V} \pm 0.9\text{V DC}$
	Input impedance (Zvin)	-	500k Ω min. (770k Ω typ.)
Phase noise		-135dBc typ. at 1kHz offset	

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

Outline and Dimensions [unit:mm]



Land Pattern(REFERENCE)



Terminal	Connection	
	CSTO-2016	CSTV-2016
#1	GND	VC
#2	GND	GND
#3	OUTPUT	OUTPUT
#4	Vcc	Vcc

