

TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR

TX083, VTX83



Applications

- GPS / LTE / Femtocell
- Communication Equipment

Features

- Dimensions (5.0×3.2×1.05)
- Seam sealed
- Low phase noise / Low power consumption
- High stability $\pm 1.0\text{ppm} / -40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Clipped sine output (DC coupled)

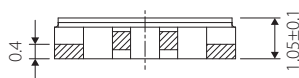
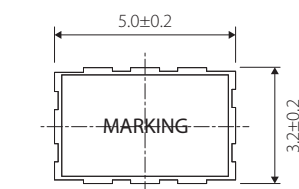
Specifications



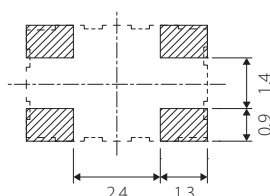
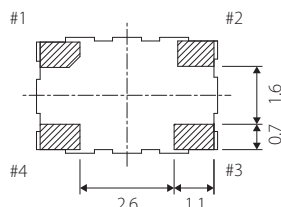
Model		TX083	VTX83
Frequency range		10~52MHz	
Nominal frequency (MHz)		10, 12, 12.8, 13, 14.4, 16.368, 19.2, 19.8, 20, 24.5535, 26, 40	
Frequency stability	Tolerance at 25°C	$\pm 2.0 \times 10^{-6}$ (Sixty minutes after reflow)	
	Temperature (Ref.to+25°C)	$\pm 1.0 \times 10^{-6} / -40 \sim +85^{\circ}\text{C}$	
	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)		$\pm 1.0 \times 10^{-6} / \text{year at } +25^{\circ}\text{C}$	
Storage temperature range		$-40 \sim +85^{\circ}\text{C}$	
Power supply voltage (Vcc)		$+1.8\text{V} \sim +3.3\text{V DC} \pm 5\%$	
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	0.8V 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	-	$+1.5\text{V} \pm 1.0\text{V DC} / 0.9 \pm 0.9\text{V DC}$
	Input impedance (Zvin)	-	500k Ω min. (770k Ω typ.)
Phase noise		-135dBc typ. at 1kHz offset	

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

Outline and Dimensions [unit:mm]



Land Pattern(REFERENCE)



Terminal	Connection	
	TX083	VTX83
#1	GND	VC
#2	GND	GND
#3	OUTPUT	OUTPUT
#4	Vcc	Vcc