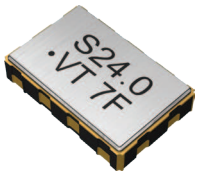
TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR

TXO83, VTX83



Applications

- Cellular / PHS / GPS / Communication Equipment

Features

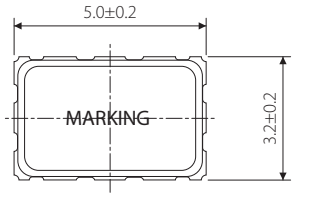
- Dimensions (5.0×3.2×1.05)
- Seam sealed
- Low phase noise / Low power consumption
- High stability ±2.5ppm / -30℃ ~+75℃
- Clipped sine output (DC coupled)

Specifications

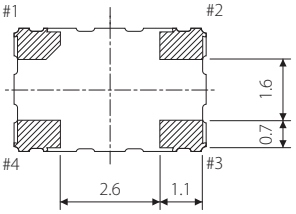
Model		TXO83	VTX83
Frequency range		6.000~45.000 MHz	
Nominal frequency (MHz)		8, 10, 12, 12.8, 13, 14.4, 16.368, 19.2, 19.8, 20, 24.5535, 26, 40	
Frequency stability	Tolerance at 25℃	$\pm 2.0 \times 10^{-6}$ (Sixty minutes after reflow)	
	Temperature (Ref.to+25℃)	$\pm 2.5 \times 10^{-6}$ / -30~+75℃	
	Supply voltage change	$\pm 0.2 \times 10^{-6}$ / Vdd ± 5%	
	Load change	$\pm 0.2 \times 10^{-6}$ / ZL ± 10%	
Aging (at 25℃)		$\pm 1.0 \times 10^{-6}$ / First year	
Storage temperature range		-40~+85℃	
Power supply voltage (Vcc)		+2.8V, +3.0V, +3.3V, +5.0V DC ±5%	
Current consumption		1.5mA max. (~20MHz), 2.0mA max. (~32MHz), 2.5mA max. (~45MHz)	
Output	Load (ZL)	10kΩ//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±1.0V DC
	Input impedance (Zvin)	—	500kΩ min. (650kΩ typ.)
Phase noise		-135dBc typ. at 1kHz offset	

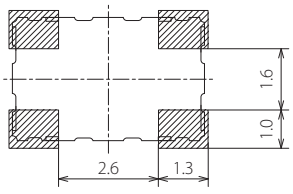
Package quantity: 1,000pcs max./Reel.

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	