

# TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR

## TX091, VTX91



### Automotive Applications Features

- GPS / WiMAX / LTE / Wifi
- Communication Equipment
- Automotive
- Ultra-thin / Dimensions (2.5 × 2.0 × 0.8)
- Sealed
- Low phase noise / Low power consumption
- High stability ± 0.5ppm / -40 ~ +105°C
- Compliant products with AEC-Q100

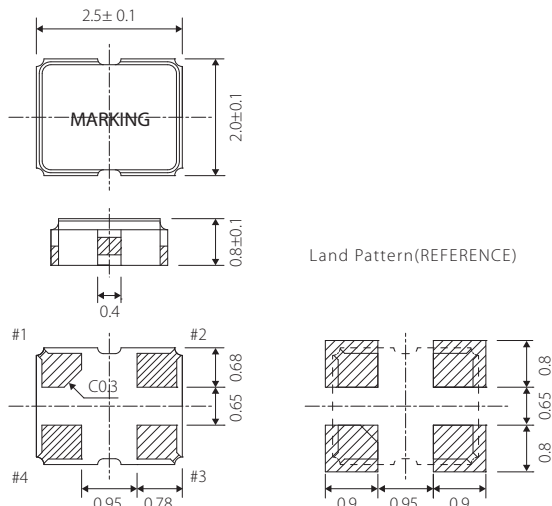
### Specifications



Model	TX091	VTX91	
Frequency range	13.000~52.000MHz		
Nominal frequency (MHz)	16.369, 16.384, 19.2, 26, 38.4, 52		
Frequency stability	Tolerance at 25°C	± 2.0 × 10 <sup>-6</sup> (Sixty minutes after refloe)	
	Temperature (Ref.to+25°C)	± 0.5 × 10 <sup>-6</sup> / -40 ~ +105°C	
	Supply voltage change	± 0.2 × 10 <sup>-6</sup> / Vdd ± 5%	
	Load change	± 0.2 × 10 <sup>-6</sup> / ZL ± 10%	
Aging	± 1.0 × 10 <sup>-6</sup> / year at +25°C		
Storage temperature range	-40 ~ +105°C		
Power supply voltage (Vdd)	+1.8V ~ +3.3V ± 5%		
Current consumption	1.5mA max. ( ~26MHz), 2.0mA max.( ~32MHz), 2.5mA max.( ~52MHz)		
Output	Load (ZL)	10KΩ // 10pF	
	Voltage	0.8Vp-p min.	
	Waveform	Clipped Sine Wave (DC-coupled output)	
External controlfunction	Frequency tuning range	-	± 8.0 × 10 <sup>-6</sup> min. (Positive)
	External control voltage	-	+1.5V ± 1.0V DC / +0.9V ± 0.9V DC
	Input impedance (Zvin)	-	500kΩ min. (770kΩ typ.)
Phase noise	-135dBc typ. at 1kHz offset		

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

### Outline and Dimensions [unit:mm]



Terminal	Connection	
	TX091	VTX91
#1	GND	VC
#2	GND	GND
#3	OUTPUT	OUTPUT
#4	Vcc	Vcc