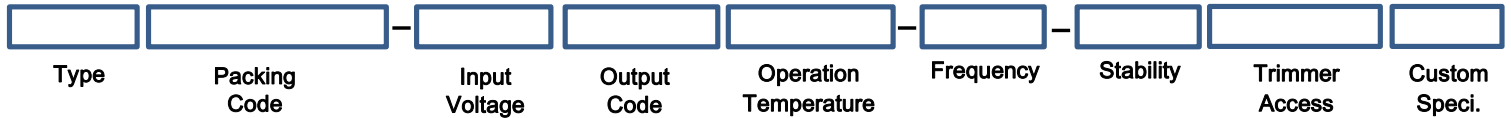


(V)TX Series:(Voltage-Controlled) Temperature Compensation Crystal Oscillators 12.000 - 52.000MHz

● SPECIFICATION

Frequency Range		12.000 - 52.000MHz				
Input Voltage (VDD)		1.8V - 3.3V				
Frequency Stability	Vs. Temperature	±0.5 ~ ±2.5PPM				
	Vs. Supply Voltage	±0.3PPM max / VDD ±5%				
	Vs. Aging	±1.0PPM per year				
	Vs. Load	±0.3PPM				
Operation Temperature		-40°C ~ +85°C (Optional , See below)				
Storage Temperature		-40°C ~ +85°C				
Linearity (VCTCXO only)	Control Voltage Range	1.8V	2.5V	2.8V / 3.0V / 3.3V		
		0.9V±0.6V	1.4V±1.0V	1.5V±1.0V		
	Pulling Range	±5.0PPM min. , Positive				
Input Impedance		500KΩ min.				
Current Consumption		2.5mA max				
Output Voltage		Clipped Sine Wave : 0.8V p-p min				
Load		10KΩ // 10pf				
Phase Noise (dBc/Hz typ.)	1Hz	10Hz	100Hz	1KHz	10KHz	100KHz
	-50	-80	-115	-135	-148	-150

● PART NUMBERING



Type	Packing Code	Input Voltage	Output Code	Operation Temperature	Frequency	Stability	Trimmer Access	Custom Speci.
TX:TCXO	SMD Type:	1.8 : 1.8V	C : Clipped	1 : -10~+60°C	In MHz	0.5 : ±0.5PPM	T : With	*
VTX:VCTCXO	11106C : 11.4x9.6x2.5(H)mm,6P	2.5 : 2.5V	Sine Wave	Blank : -10~+70°C		1 : ±1.0PPM	Trimmer	
	11106T : 11.4x9.6x2.5(H)mm,6P	2.8 : 2.8V		2 : -20~+70°C		1.5 : ±1.5PPM	Blank : Without	
	11104C : 11.4x9.6x2.5(H)mm,4P	3 : 3V	T : CMOS	27 : -20~+75°C		2 : ±2.0PPM	Trimmer	
	11104T : 11.4x9.6x2.5(H)mm,4P	3.3 : 3.3V	Square Wave	28 : -20~+85°C		2.5 : ±2.5PPM		
	754C : 7.0x5.0x2.3(H)mm,4P	5 : 5V		37 : -30~+75°C		3 : ±3.0PPM		
	754T : 7.0x5.0x2.3(H)mm,4P	8 : 8V		3 : -30~+80°C		5 : ±5.0PPM		
	534C : 5.0x3.2x1.2(H)mm,4P	9 : 9V		38 : -30~+85°C				
	534T : 5.0x3.2x1.3(H)mm,4P	10 : 10V		I : -40~+85°C				
	324C : 3.2x2.5x1.0(H)mm,4P	12 : 12V		A : -40~+105°C				
	324T : 3.2x2.5x1.0(H)mm,4P	A : 1.8~3.3V		B : -40~+125°C				
	224C : 2.5x2.0x0.8(H)mm,4P	B : 2.5~3.3V		C : -55~+125°C				
	214C : 2.0x1.6x0.7(H)mm,4P			D : -40~+150°C				
				X : Custom				

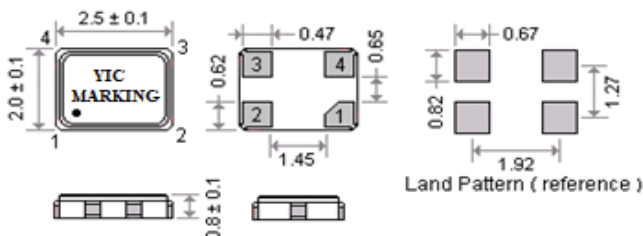
Through-Hole Type:

- 2013C : 20.3x12.8x7.0(H)mm
- 2013T : 20.3x12.8x7.0(H)mm
- 1812C : 18.4x11.7x4.7(H)mm
- 1812T : 18.4x11.7x4.7(H)mm
- 1313C : 12.2x12.8x5.5(H)mm
- 1313T : 12.2x12.8x5.5(H)mm

(※ "C" for Clipped Sine Wave)

(※ "T" for CMOS)

● DIMENSIONS (UNIT : mm)



Pad Connections :

Pad 1	Control voltage for VCTCXO ; Ground for TCXO .
Pad 2	Ground
Pad 3	Output
Pad 4	Input Voltage