

The ECS-TXO-10C1 is a TCXO (Temperature Compensated Crystal Oscillator) featuring very tight stability over a wide temperature range. An internal trimmer is a standard feature to tune the TCXO to its nominal frequency. The standard DIP 14 pin pitch TCXO is ideal for wireless communication applications.

- OPTIONS:
- 3V operation
  - 2 TTL/CMOS I5 pF load
  - voltage control function

## FEATURES

- Highly stable output over wide temperature range
- 4.7mm height max. low profile TCXO
- Industry standard DIP 14 pin lead spacing

## PART NUMBERING GUIDE "EXAMPLE"

PART NUMBER*	WAVEFORM	CONTROL OPTION
ECS-TXO-10C1	CLIPPED SINE WAVE	NO VOLTAGE CONTROL
ECS-TXO-10D1	2 TTL/15pF CMOS	NO VOLTAGE CONTROL
ECS-VTXO-10C1	CLIPPED SINE WAVE	VOLTAGE CONTROL
ECS-VTXO-10D1	2 TTL/15pF CMOS	VOLTAGE CONTROL

\* Complete part number to include frequency. i.e. ECS-TXO-10C1-100 (100 = 10 MHz)

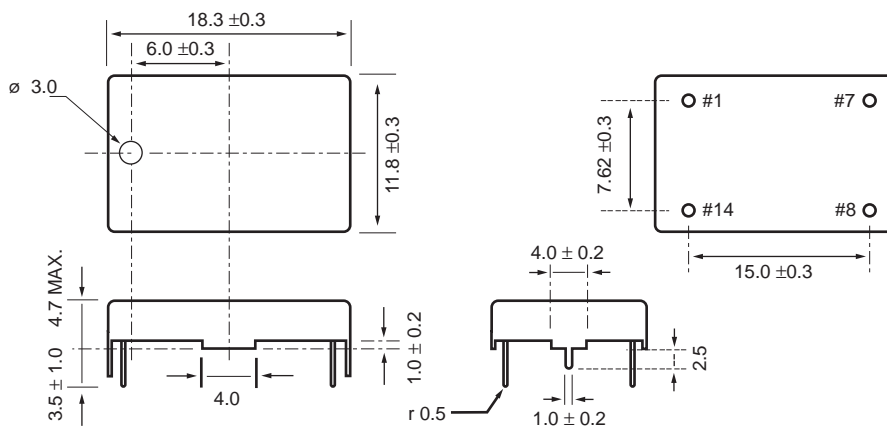
## STANDARD FREQUENCIES

11.300, 12.800, 15.360, 19.200 and 21.250 MHz

## OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	SPECIFICATIONS				UNITS
		ECS-TXO-10C1	ECS-TXO-10D1	ECS-VTXO-10C1	ECS-VTXO-10D1	
TYPE		ECS-TXO-10C1	ECS-TXO-10D1	ECS-VTXO-10C1	ECS-VTXO-10D1	
FREQUENCY RANGE	$f_0$	9.600 ~ 26.000		9.600 ~ 26.000		MHz
FREQUENCY TOLERANCE	@ 25°C	±0.5		±0.5		PPM
FREQUENCY STABILITY	-30°C ~ +75°C	±2.5		±2.5		PPM
SUPPLY VOLTAGE		+5 ±5%		+5 ±5%		V
SUPPLY CURRENT		2.0 Max.		2.0 Max.		mA
OUTPUT LEVEL		1Vp-p Min. (Clipped Sine)	HCMOS/TTL	1Vp-p Min. (Clipped Sine)	HCMOS/TTL	
OUTPUT LOAD		10K ohm 15pF	2 TTL 15pF CMOS	10K ohm 15pF	2 TTL 15pF CMOS	
AGING (PER YEAR @ +25°C)	$\Delta f/f_0$	±1.0		±1.0		PPM
FREQUENCY ADJUSTMENT	Internal Trimmer	±3.0 Min.		±3.0 Min.		PPM
VOLTAGE CONTROL RANGE	@ 2.5 ±2.0V	N/A		±8.0 Min.		PPM
STORAGE TEMPERATURE	-40 ~ +85					°C

## PACKAGE DIMENSIONS (mm)



ECS-TXO-10C1 SERIES - Top, Side and Bottom views

PIN CONNECTIONS	
#1	N.C. or Vcont
#7	GND/CASE
#8	OUTPUT
#14	+Vcc