

The ECS-500X temperature compensated oscillator covers a wide frequency range and offers a highly stable output over temperature. An internal trimmer is a standard feature to tune the TCXO to its nominal frequency.

## FEATURES

- Highly stable output over temperature
- Wide frequency range
- RoHS Compliant (Pb Free)
- TTL/CMOS Compatible

## PART NUMBERING GUIDE “EXAMPLE”

	SERIES	FREQUENCY (14.4 MHz)	FREQUENCY STABILITY (B=± 5.0 PPM)
ECS	- 500X	- 144	- B

## OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
FREQUENCY RANGE		8.000		80.000	MHz
FREQUENCY STABILITY	Option A	-7.0		+7.0	PPM
	Option B	-5.0		+5.0	PPM
	Option C	-3.5		+3.5	PPM
OPERATING TEMPERATURE		-20		+70	°C
STORAGE TEMPERATURE		-30		+80	°C
INPUT VOLTAGE (V <sub>cc</sub> )		4.5 V	5.0 V	5.5 V	V DC
INPUT CURRENT	8.0 TO 30.0 MHz			15	mA
	30.0 TO 80.0 MHz			60	mA
SYMMETRY	at 1.4 VDC Level	40/60	50 ±4	60/40	%
	at 1/2 V <sub>cc</sub> Level	45/55	50 ±2	55/45	%
RISE TIME	8.0 TO 30.0 MHz			13	ns
	30.0 TO 80.0 MHz			8	ns
FALL TIME	8.0 TO 30.0 MHz			11	ns
	30.0 TO 80.0 MHz			6	ns
“0” LEVEL	TTL			+0.4	V
	CMOS			+0.5	V
“1” LEVEL	TTL	+2.4			V
	CMOS	V <sub>cc</sub> -0.5			V
OUTPUT LOAD	TTL			10	TTL gates
	CMOS			15	pF
START-UP TIME	8.0 TO 30.0 MHz			10	ns
	30.0 TO 80.0 MHz			7	ns
FREQUENCY ADJUSTMENT	Internal Trimmer	±5			PPM

## PACKAGE DIMENSIONS (mm)

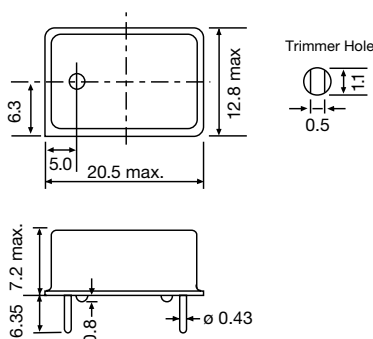


Figure 1) ECS-500X – Top, Side and Bottom views

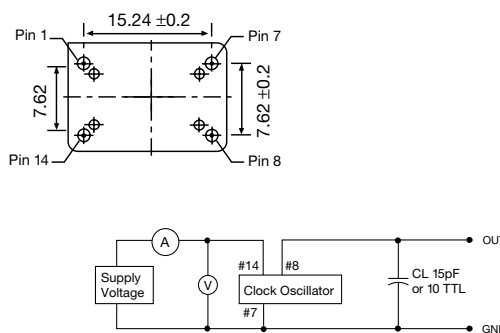


Figure 2) Test Circuit

PIN CONNECTIONS	
#1	N.C.
#7	GND
#8	OUTPUT
#14	+VCC

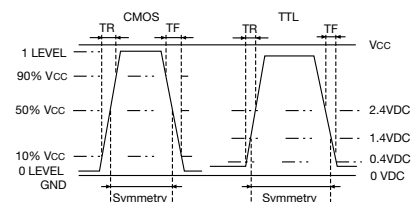


Figure 3) Output Waveform