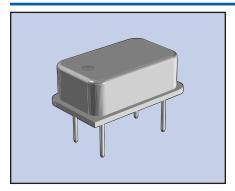
# ECS-500X SERIES TEMPERATURE COMPENSATED OSCILLATOR





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

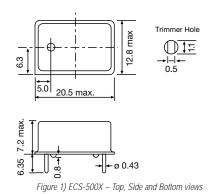
## PART NUMBERING GUIDE "EXAMPLE"

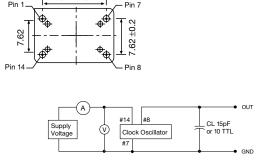
SERIES	FREQUENCY (14.4 MHz)	FREQUENCY STABILITY (B=± 5.0 PPM)
-	-	-

### **OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS**

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

## PACKAGE DIMENSIONS (mm)





1 LEVEL —	CMOS TF	TR TF	- Vcc
90% Vcc — 50% Vcc —	/		2.4VDC
10% Vcc — · · · · · · · · · · · · · · · · · ·	Symmetry	Symmetry	0.4VDC 0 VDC

#7

#8

#14

PIN CONNECTIONS

GND

OUTPUT

+Vcc

Figure 2) Test Circuit

Figure 3) Output Waveform