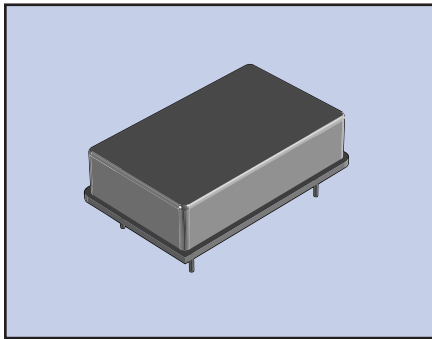




The ECS-VXO-11X Series is a wide frequency, tight tolerance, voltage controlled crystal oscillator. Featuring a wide VCO range of ± 200 ppm, this oscillator is a serious performer in applications such as wireless communications, video data compression or PLL.

FEATURES

- Wide voltage control range
- Wave form symmetry of 40/60%
- HCMOS or TTL output
- Industry standard DIP 14 pin lead spacing
- PbFree/RoHS Compliant



PART NUMBERING GUIDE "EXAMPLE"

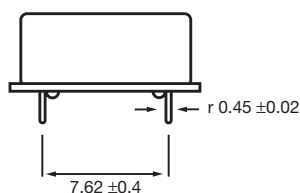
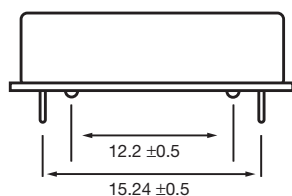
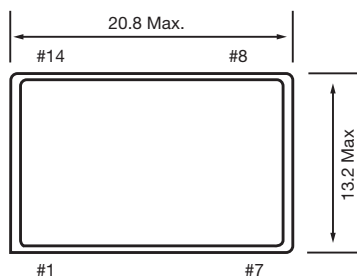
PACKAGE TYPE	FREQUENCY STABILITY ①	TTL OUTPUT LOGIC ②	VOLTAGE CONTROL RANGE ③	FREQUENCY (40.000MHz)
ECS-VXO-11X	- B	- TT	- 2	- 400

Example - ± 50 PPM Stability, TTL Logic, ± 100 PPM Voltage Control Range, 40 MHz.

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	SPECIFICATIONS	UNIT
FREQUENCY RANGE	ALL	12.000 - 100.000	MHz
FREQUENCY STABILITY ①	0 ~ +70°C	± 25 (A)	PPM
		± 50 (B)	PPM
OUTPUT LOGIC ②	TTL type	2 (TT)	TTL
	HCMOS type	15 (HC)	pF
VOLTAGE CONTROL RANGE ③	12.0MHz ~ 45MHz	± 50 (1), ± 100 (2), ± 150 (3), ± 200 (4), Custom(0)	PPM
	45.1MHz ~ 100MHz	± 50 (1), Custom(0)	PPM
RISE AND FALL TIME	12.0MHz ~ 45MHz	8 max.	nsec.
	45.1MHz ~ 100MHz	5 max.	nsec.
OUTPUT VOLTAGE	V_{OH}	2.4 min. / V_{DD} - 0.5 min.	V
	V_{OL}	0.4 max.	V
CURRENT CONSUMPTION	12.0MHz ~ 45MHz	50 max.	mA
	45.1MHz ~ 100MHz	70 max.	mA
VOLTAGE CONTROL	ALL	2.5 ± 2.0	V
AGING @ +25°C	Per Year	± 3.0	PPM
SUPPLY VOLTAGE	ALL	$5.0 \pm 5\%$	VDC
STORAGE TEMPERATURE	ALL	-55 ~ + 125	°C

PACKAGE DIMENSIONS (mm)



ECS-VXO-11X Series - Top and Side views

PIN CONNECTIONS	
#1	VC
#7	GND/CASE
#8	OUTPUT
#14	+Vcc