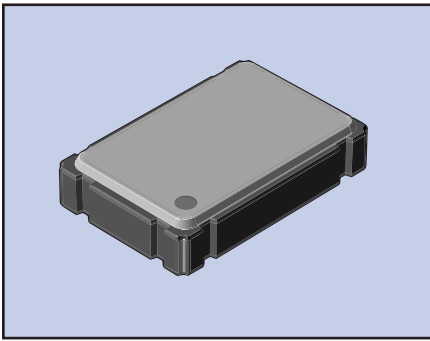




The ECS-VX0-97 offers the frequency control of a VCXO in a SMD, ceramic package. Frequency can be pulled up to ± 100 ppm by varying the control voltage of 2.5V by up to ± 2.0 V.

FEATURES

- 2.0 mm low profile
- Waveform symmetry of 40/60%
- SMD version
- 3.3V operation (optional)
- Tape & Reel (1000 pcs)
- PbFree/RoHS Compliant



PART NUMBERING GUIDE "EXAMPLE"

PART NUMBER	FREQUENCY (16.0 MHz)	FREQUENCY CONTROL RANGE
ECS-VX0-97	- 160	- A

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
FREQUENCY RANGE	F_0	8.000		40.000	MHz
FREQUENCY STABILITY	All conditions	-30		+30	PPM
FREQUENCY CONTROL RANGE	(A)	$V_C = +2.5 \text{ VDC} \pm 2.0\text{V}$	-50	+50	PPM
	(B)	$V_C = +2.5 \text{ VDC} \pm 2.0\text{V}$	-75	+75	PPM
	(C)	$V_C = +2.5 \text{ VDC} \pm 2.0\text{V}$	-100	+100	PPM
OPERATING TEMPERATURE	T_{OPR}	-10		+60	$^{\circ}\text{C}$
STORAGE TEMPERATURE	T_{STG}	-30		+85	$^{\circ}\text{C}$
INPUT VOLTAGE (V_{CC})		+4.75	+5	+5.25	V DC
CONTROL VOLTAGE (V_C)		+0.5	+2.5	+4.5	V DC
INPUT CURRENT				25	mA
OUTPUT (-10 $^{\circ}$ TO +70 $^{\circ}$ C)	SYMMETRY	at 1/2 V_{CC} Level	40/60	50 $\pm$ 10	%
	RISE AND FALL TIMES			10	ns
	"0" LEVEL			$V_{CC} \times 0.1\text{V}$	V
	"1" LEVEL		$V_{CC} \times 0.9\text{V}$		V
	LOAD	HCMOS		15	pF
FREQUENCY LINEARITY		-10		+10	%
RISE AND FALL TIMES				10	ms

PACKAGE DIMENSIONS (mm)

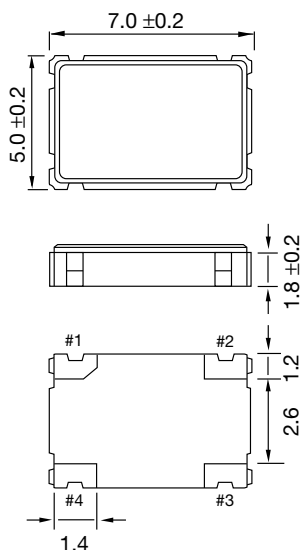


Figure 1) ECS-VX0-97 – Top, Side and Bottom views

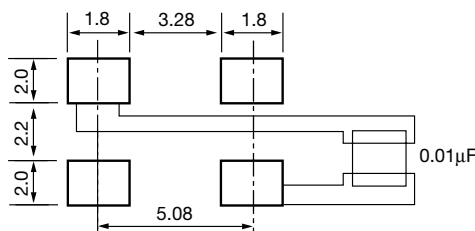
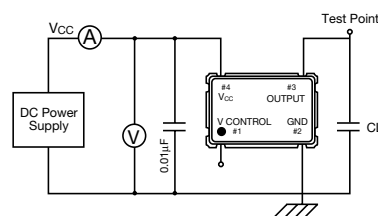


Figure 2) Land Pattern



CL: Including fixture and probe capacitance.

Figure 3) Test Circuit

PIN CONNECTIONS	
#1	V CONTROL
#2	GND
#3	OUTPUT
#4	VCC

PACKAGE DATA	
COVER	METAL
BASE	CERAMIC
SEALING	SEAM-WELD
TERMINAL PLATING	GOLD

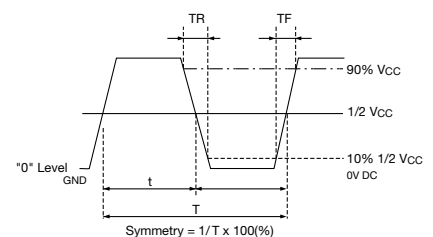


Figure 4) Output Wave Form