Transko Cal Crystal Comclok

TX97A

RoHS Compliant

PCB BASE SMD TCXO / VCTCXO (9.0 x 7.0 x 2.1mm)

FEATURES

- STABILITY UP TO ± 0.5ppm
- CSW / HCMOS / SINEWAVE
- 2.8V / 3.3V / 5.0V

■ SPECIFICATION

PARAMETER			MIN.	TYP.	MAX.	UNIT	NOTE
FREQUENCY RANGE	CSW		10		52	MHz	
	HCMOS / SINEWAVE		1		250	MHz	
FREQUENCY TOLERANCE					±1.0	ppm	@25°C
FREQUENCY STABILITY	vs. TEMPERATURE RANGE		±0.5		±5.0	ppm	See P/N guide for options
	vs. LOAD ± 10%				±0.2	ppm	
	vs. SUPPLY VOLTAGE ± 5%				±0.2	ppm	
	vs. AGING				±1.0	ppm	
OPERATING TEMPERATURE RANGE			-40		85	°C	See P/N guide for options
STORAGE TEMPERATURE RANGE			-55		125	°C	
SUPPLY VOLTAGE ±5%			2.8		5.0	V	See P/N guide for options
SUPPLY CURRENT	CSW				3.0	mA	
	HCMOS / SINEWAVE		10		50	mA	Frequency dependent
OUTPUT	CSW	LOAD		10KΩ // 10pF			
		LEVEL (3.3V)	0.8			V_{P-P}	
		LEVEL (5.0V)	1.0			V_{P-P}	
	HCMOS	LOAD		15		pF	
		VoL LEVEL			0.1 x VDD	V	
		VoH LEVEL	0.9 x VDD			V	
		DUTY CYCLE	45		55	%	
		Tr / Tf			5	nS	@20MHz
	SINE WAVE	LOAD		50		Ω	
		LEVEL (3.3V)	0			dBm	
		LEVEL (5.0V)		+5		dBm	
VCTCXO OPTION	PULLABILITY		±5			ppm	See P/N guide for options
	CONTROL VOLTAGE	3.3V	0.15	1.65	3.15	V	
		5.0V	0	2.5	5.0	V	
PHASE NOISE @ 20MHZ		10Hz		-90		dBc/Hz	
		100Hz		-120		dBc/Hz	
		1KHz		-138		dBc/Hz	
		10KHz		-143		dBc/Hz	
		100KHz		-148		dBc/Hz	

Transko Electronics, Inc reserves the right to make changes to the product (s), service (s), and specification (s) described herein without notice. See "Terms of Sale" for details on our website.

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Rev 1: 07-11-2024

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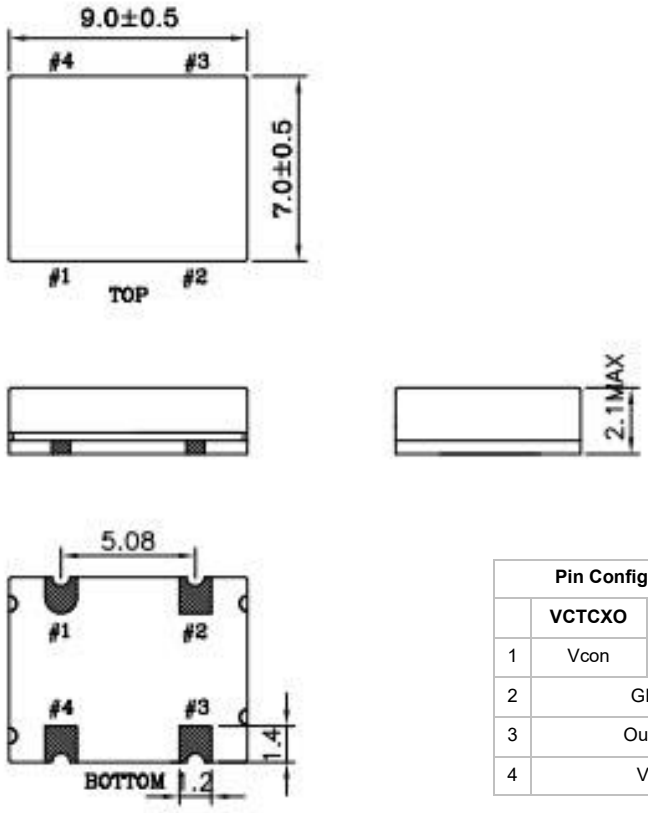
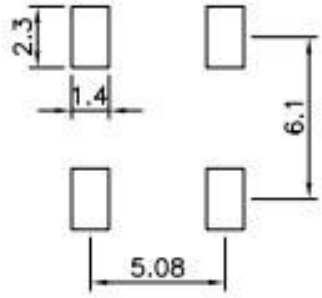
■ PACKAGE DIMENSIONS (mm)

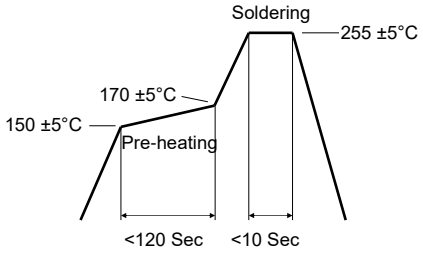


Pin Configuration		
	VCTCXO	TCXO
1	Vcon	NC
2	GND	
3	Output	
4	V_{CC}	

■ SOLDER PATTERN (mm)



■ REFLOW PROFILE



Note: Consult factory for detail

■ PART NUMBERING GUIDE

TX97A – R 10 K 33 05 – 10.000M – TR

TX97A

OUTPUT
- **P:** Clipped sine wave
- **R:** HCMOS
- **Q:** Sine wave

STABILITY VS TEMP
- **05:** ± 0.5ppm
- **10:** ± 1.0ppm
- **15:** ± 1.5ppm
- **20:** ± 2.0ppm
- **25:** ± 2.5ppm
- **30:** ± 3.0ppm
- **50:** ± 5.0ppm
- **XX:** Two digit for Stability

OPERATING TEMP.
- **G:** 0º to 55ºC **I:** -10º to 60ºC
- **J:** -10º to 70ºC **K:** -20º to 70ºC
- **L:** -30º to 70ºC **M:** -40º to 85ºC
- **O:** -30º to 85ºC

SUPPLY VOLTAGE
- **28 :** 2.8V
- **33 :** 3.3V
- **50 :** 5.0V

PULLABILITY (VCTCXO option only)
- **05:** ±5.0 ppm min.
- **08:** ±8.0 ppm min.
- **10:** ±10.0 ppm min.
- **BLANK:** TCXO

FREQUENCY
- **M:** MHz

TAPE & REEL
- **TR:** tape reel
- **Blank:** Cut tape

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