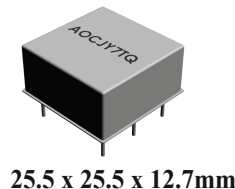


Ultra-Low Phase Noise OCXO

AOCJY7TQ



25.5 x 25.5 x 12.7mm

FEATURES:

- Exceptional Close to the carrier Maximum Phase Noise of -155dBc/Hz @ 1kHz & -170dBc/Hz @ 10kHz offset from 100.0 MHz Carrier
- SC-Cut, High “Q” resonator based design
- 100.0MHz carrier frequency
- Excellent Frequency Stability of ± 50.0 ppb over the operating temperature range of -40°C to $+70^{\circ}\text{C}$
- Tuned Sinewave output into a 50Ω load
- Industry Standard, 25.5 x 25.5 x 12.7mm RoHS compliant & Pb free package

APPLICATIONS:

- COTS Military & Industrial Radios & Timing Circuits
- Cellular Infrastructure
- Radar Systems
- Test & Measurement Equipment
- GPS Tracking with precision hold-over accuracy
- WiMax / WLAN
- Precision primary frequency reference clocks

STANDARD SPECIFICATIONS:

Maximum Rating

Parameters	Rating
Storage Temperature Range	-55 to $+125^{\circ}\text{C}$
Supply Voltage	-0.3 to 15V
Control Voltage	0 to 5V
ESD, HBM/CDM/MM	$2\text{kV}/1\text{kV}/200\text{V}$

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency (Fc)		100.000		MHz	
Initial Frequency Tolerance (@ $+25^{\circ}\text{C}$) at shipping			± 300	ppb	
Warm-up Time (@ $+25^{\circ}\text{C}$)			5	minutes	with accuracy of ± 100 ppb
Frequency Stability Options (Ref. to Frequency @$+25^{\circ}\text{C}$)					
-40°C to $+70^{\circ}\text{C}$			± 50	ppb	Option “5”
-40°C to $+70^{\circ}\text{C}$			± 100	ppb	Option “1”
-40°C to $+85^{\circ}\text{C}$			± 200	ppb	Option “2”
Frequency Stability vs. Supply Voltage Change ($V_{\text{dd}}\pm 5\%$)			± 10	ppb	
Frequency Stability vs. Load Change (Load $\pm 5\%$)			± 10	ppb	
Aging per Day (after 30 days of operation)			± 5	ppb	
Aging per Year (after 30 days of operation)			± 500	ppb	
Supply Voltage (V_{dd})	$+11.4$	$+12.0$	$+12.6$	V	
Power Consumption	During Warming-up		4.5	W	
	Steady@ $+25^{\circ}\text{C}$ & still air		1.5	W	
Control Port (Applicable for Voltage Controlled version only)					
Control Voltage Range (V_{c})	$+0$	$+2.5$	$+5$	V	
Center Control Voltage (V_{c})		$+2.5$		V	To be with-in ± 300 ppb of Fc @ 25°C
Frequency Tuning Range		± 1000		ppb	
Tuning Slope		Positive			
Linearity			± 10	%	
Port Impedance	50			$\text{k}\Omega$	

Ultra-Low Phase Noise OCXO

AOCJY7TQ



25.5 x 25.5 x 12.7mm

STANDARD SPECIFICATIONS:

(Continued)

Parameters	Minimum	Typical	Maximum	Unites	Notes
Phase Noise* (100MHz carrier frequency @25°C):		<-95	-93	dBc/Hz	Offset @10Hz
		<-126	-125		Offset @100Hz
		<-161	-155		Offset @1kHz
		-171	-170		Offset @10kHz
		-173	-170		Offset @100kHz
		-174	-170		Offset @1MHz
		-173	-170		Offset @10MHz
		-174	-170		Offset @20MHz
RMS Jitter (12kHz to 20MHz)		20	40	fs	
Sine Wave Output					
Output Level	8			dBm	
Harmonics			-30	dBc	
Spurious			-70	dBc	
Load		50		Ω	

* Close to carrier phase noise is a few dB better in fixed clock configuration than the voltage controlled configuration

PART IDENTIFICATION:

AOCJY7TQ - - 100.000MHz -

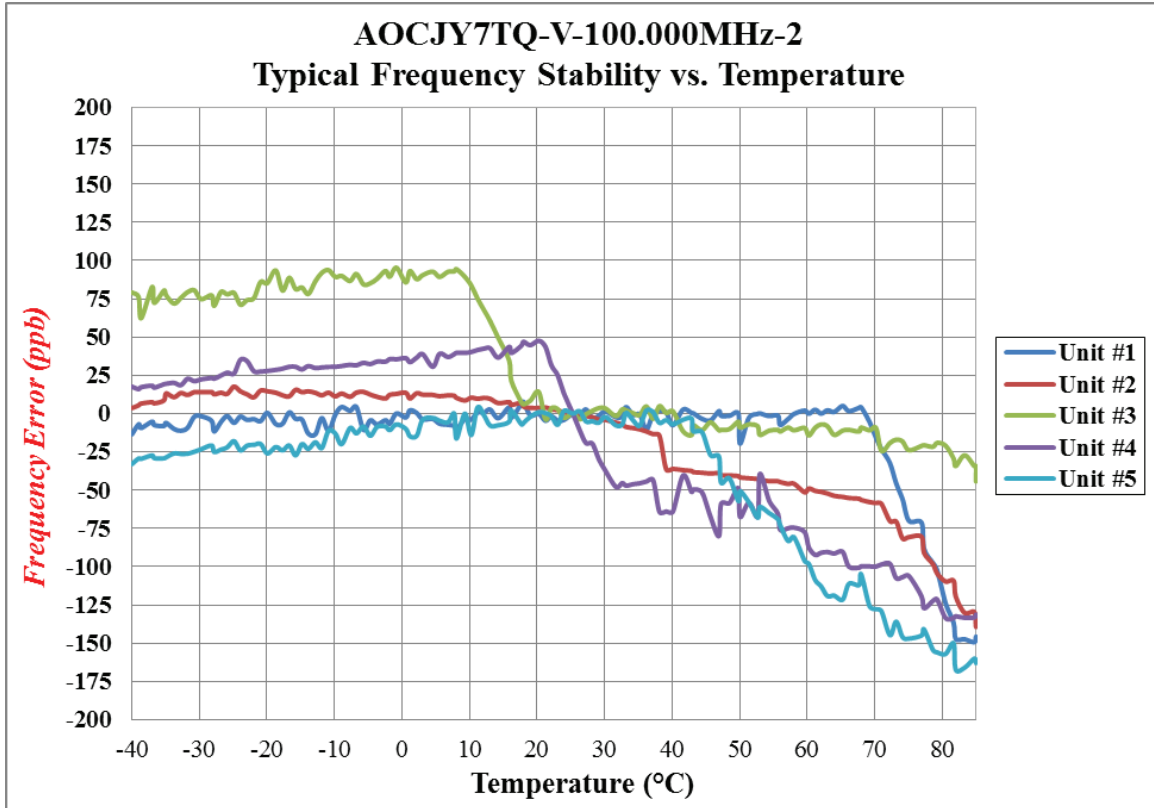
Fixed Clock or Voltage Controlled
X = Fixed Clock
V = Voltage Controlled

Freq. Stability over Operating Temp.
5: ±50ppb
1: ±100ppb
2: ±200ppb

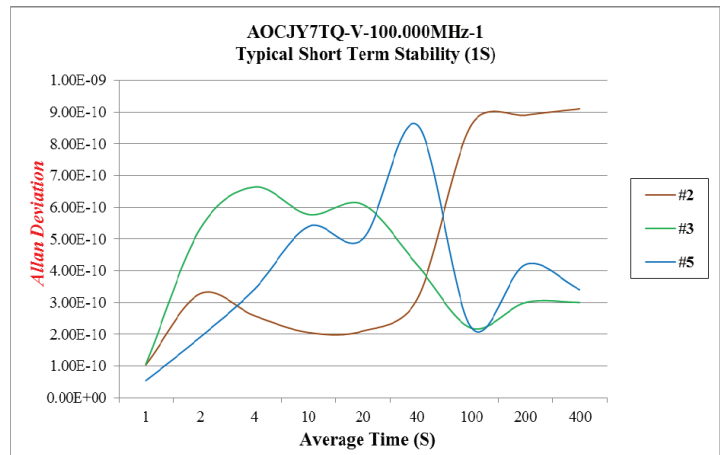
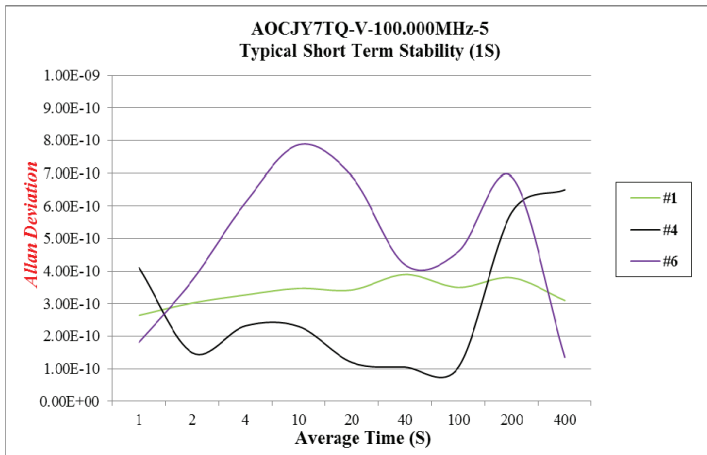


25.5 x 25.5 x 12.7mm

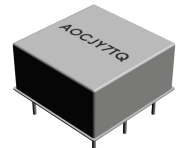
TYPICAL FREQUENCY STABILITY VS. TEMPERATURE



TYPICAL SHORT TERM STABILITY



Ultra-Low Phase Noise OCXO

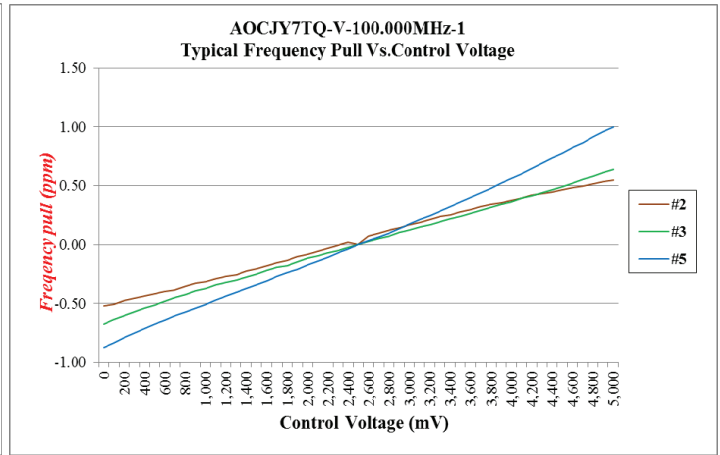
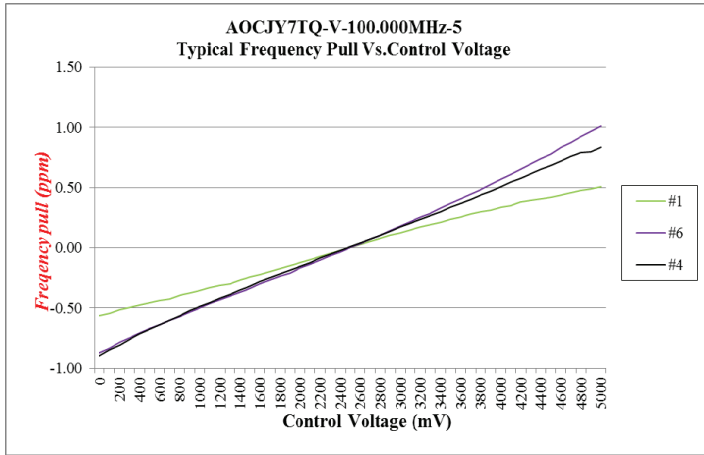


25.5 x 25.5 x 12.7mm

AOCJY7TQ

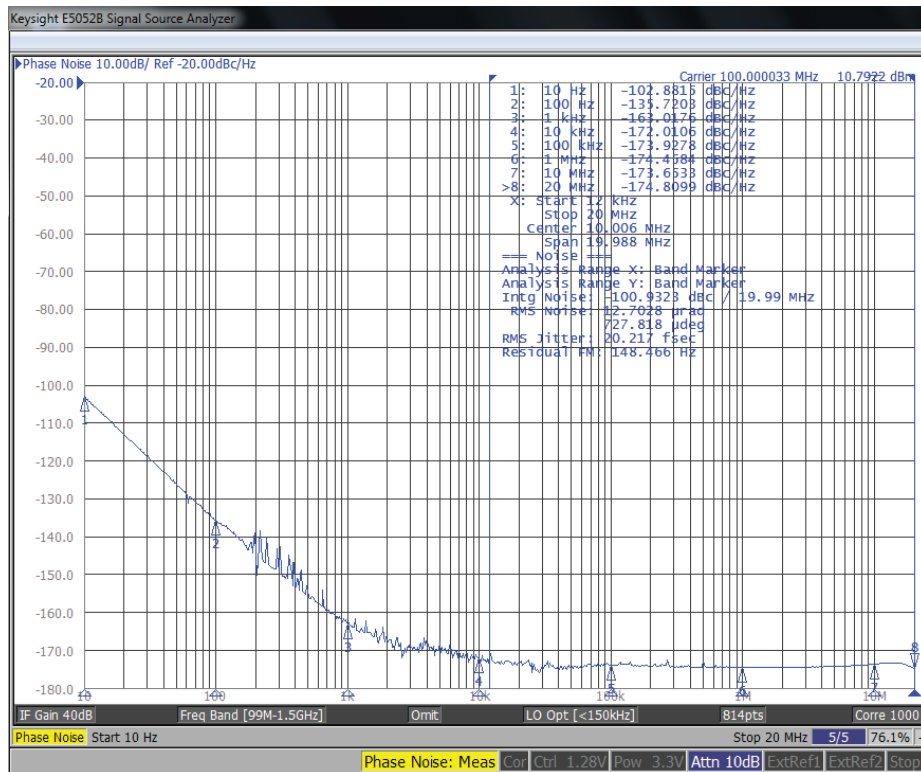


TYPICAL FREQUENCY PULL VS. CONTROL VOLTAGE



TYPICAL PHASE NOISE

100.00 MHz Carrier



ABRACON IS
ISO9001:2008
CERTIFIED



2 Faraday, Suite# B | Irvine | CA 92618 Revised: 07.21.15
Ph. 949.546.8000 | Fax. 949.546.8001
Visit www.abracon.com for Terms and Conditions of Sale

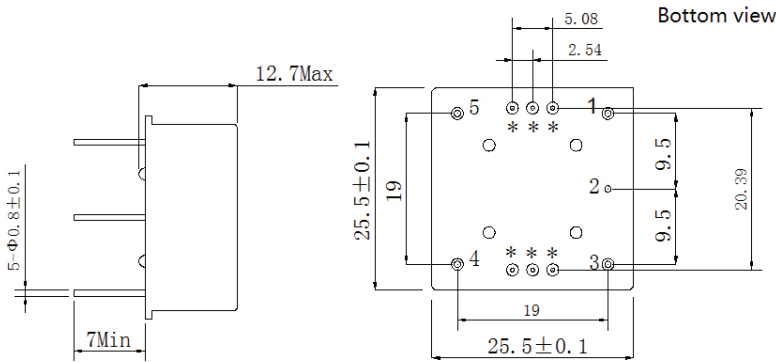
Ultra-Low Phase Noise OCXO

AOCJY7TQ

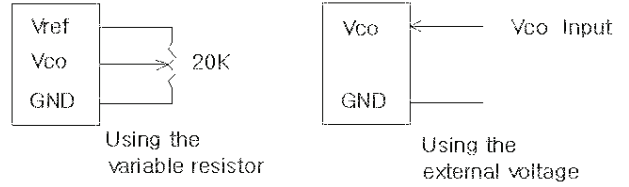


25.5 x 25.5 x 12.7mm

OUTLINE DIMENSION:



Reference Connection of Voltage Control Circuit



Pin	Function
1	RF Output
2	GND, Case
3	Vc (see Note 2 below)
4	Vref (See Note 3 below)
5	Vdd

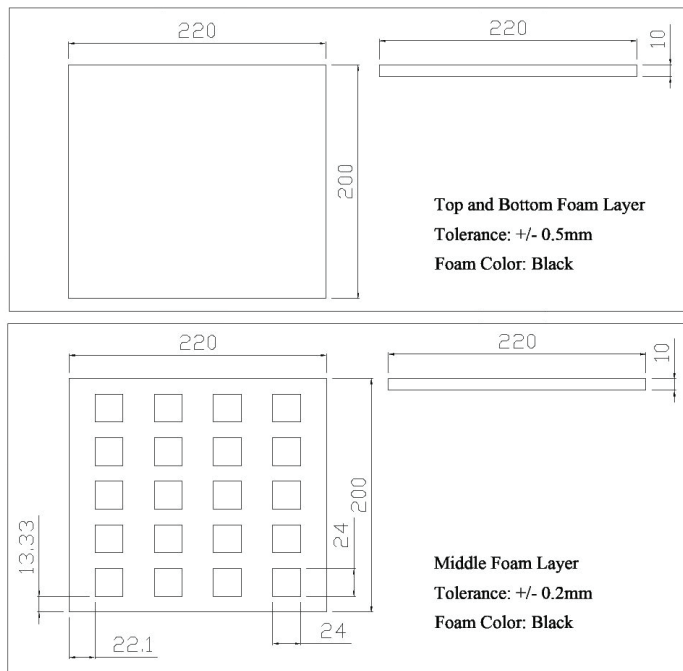
Notes:

1. The pins with "*" are for factory testing purpose.
2. Please leave pin 3 not connected if Vc is not used.
3. Please leave pin 4 not connected if Vref is not used.

Dimensions: mm

TAPE & REEL:

20pcs/ ESD Foam Tray



Dimensions: mm

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO9001:2008
CERTIFIED



2 Faraday, Suite# B | Irvine | CA 92618 Revised: 07.21.15
Ph. 949.546.8000 | Fax. 949.546.8001
Visit www.abracon.com for Terms and Conditions of Sale

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru