

Oven Controlled Crystal Oscillators

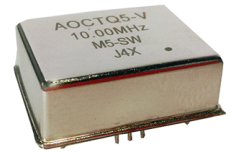
AOCTQ5



ESD Sensitive



RoHS/RoHS II compliant



36.1 x 27.1 x 12.1 mm Leaded

FEATURES:

- 36.1x 27.1 x 12.1mm Leaded- RoHS Compliant Package
- SC-Cut, High “Q” resonator based design
- Either CMOS or Sinewave output
- Tight frequency stability:
 - ± 3 ppb accuracy over -40°C to +85°C temperature range
 - ± 5 ppb accuracy over -55°C to +85°C temperature range
- Excellent close-in phase noise (-145 dBc/Hz max. @1kHz offset; 10MHz carrier)
- Ideal for Low-g-Sensitivity Designs (0.3 ppb/g maximum)

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Notes
RF Output					
Frequency		10.00		MHz	
Supply Voltage (Vdd)		5		Vdc	
Power Consumption			5	W	During Warming-up
			1.6	W	Steady-State @ +25°C & under still air
Waveform	Sinewave				
Output Level	+7		+14	dBm	
Harmonics			-35	dBc	
Spurious			-70	dBc	
Output Load		50		Ω	
Waveform	HCMOS				
V _{OH}	2.4			V	With Load =15pF
V _{OL}			0.4	V	
Duty Cycle	45		55	%	@ (V _{OH} - V _{OL})/2
Rise/Fall Time			6	ns	With Load =15pF
Output Load			15	pF	
Storage Temperature Range	-55		+125	°C	
Initial Frequency Tolerance			±10	ppb	At shipment, nominal EFC
Short-term Stability (1 sec)			5 x 10 ⁻¹¹		Test after 15 minutes
Warm-up Time			10	Minutes	@+25°C, with-in ±5ppb of final frequency
G-Sensitivity			0.3	ppb/g	
Frequency Stability vs. Temp.					Available Options
-40° C to +85°C			±3	ppb	Option “I3”
			±5	ppb	Option “I5”
-55° C to +85°C			±5	ppb	Option “M5”
			±10	ppb	Option “M10”
Frequency Stability vs. Supply Voltage (Vdd ± 5%)			±3	ppb	
Frequency Stability vs. Load Variation (Load ± 5%)			±3	ppb	
Aging					
Per Day			±0.5	ppb	After 30 days in operation
Per Year			±50	ppb	

Oven Controlled Crystal Oscillators

AOCTQ5



RoHS/RoHS II compliant



36.1 x 27.1 x 12.1 mm Leaded

STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Notes
Phase Noise (10MHz Carrier) @ +25°C					
@ 10 Hz offset		-120		dBc/Hz	
@ 100 Hz offset		-140		dBc/Hz	
@ 1,000 Hz offset		-145		dBc/Hz	
@ 10,000 Hz offset		-155		dBc/Hz	
@ 100,000 Hz offset		-160		dBc/Hz	
Electrical Frequency Adjustment					For Voltage Control Option only
Control Voltage Range (Vc)	0		5	Vdc	
Center Control Voltage (Vc)	2.30	2.50	2.70	Vdc	To be with-in ±10 ppb from 10.000MHz (as received)
Frequency Pull Range	±500			ppb	
Frequency Pull Slope	Positive				

Maximum Ratings

Parameters	Min.	Typ.	Max.	Units	Notes
Supply Voltage (Vdd)	-0.3		15	V	
Control Voltage (Vc)	0		5	V	
ESD, HBM/CDM/MM	3kV/1kV/200V				

PART IDENTIFICATION:

AOCTQ5 - -10.000 MHz - -

Fixed or Voltage Controlled
X = Fixed
V = Voltage Controlled

Operating Temp. Range	Frequency Stability (ppb)		
	±3	±5	±10
-40°C to +85°C	I3	I5	
-55°C to +85°C		M5	M10

Output Type
Blank: CMOS
SW: Sinewave

Oven Controlled Crystal Oscillators



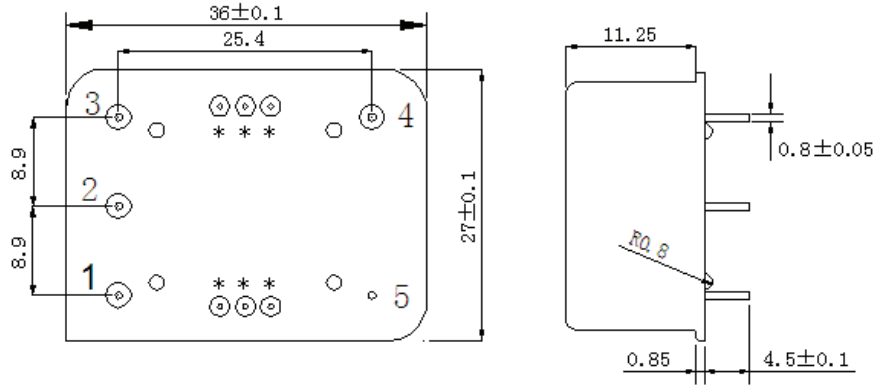
36.1 x 27.1 x 12.1 mm Leaded

AOCTQ5



RoHS/RoHS II compliant

OUTLINE DIMENSION:

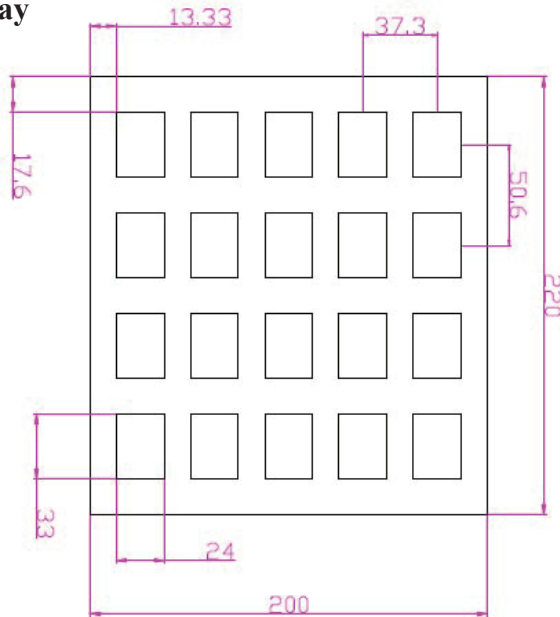


Pin No.	Function	
	Fixed	Voltage Controlled
1	NC	Control Voltage (Vc)
2	NC	
3	Power Supply (Vdd)	
4	Output (Fout)	
5	Ground, Case (GND)	
*	For factory test only	

Dimensions: mm

TAPE & REEL:

Packaging: 20pcs/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.



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

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9