MINIATURE HIGH FREQUENCY (UP TO 220MHZ) SMD CRYSTAL OSCILLATOR AHCO 7050 SERIES

AOR offers wide variety of high frequency (up to 220MHz) crystal clock oscillator products in a miniature 7 x 5.2mm SMD package. AHCO 7050 oscillator product line includes low voltage differential signaling (lvds) oscillators, positive-referenced emitter-coupled logic (pecl) oscillators, sine-wave & clipped sine-wave oscillators, hcmos clock oscillators, low-voltage oscillators, voltage controlled and temperature compensated oscillators. Applications include computer peripherals, industrial instrumentation, oil drilling, geothermal, commercial space, LAN/WAN, optical networks, process controls, telecommunications and wireless products.

● CMOS, HCMOS
● PECL   - Positive-reference Emitter-Coupled Logic
● LVDS   – Low Voltage Differential Signal

AOR®

AOR, LTD.
Tokyo, Japan
www.aorja.com

AHCO7050C

HIGH FREQUENCY CMOS OUTPUT SMD CLOCK OSCILLATOR

The AHCO7050C is CMOS output level SMD crystal clock oscillator
with high frequecy range 75.0MHz to 212.500MHz.
Ceramic package and metal lid by seam sealing has extreamly accuracy and reliability.

❑ FEATURES

- Tri-State functioned.
- Can be mounted to PCB using a lead free solder reflow process.
- Complied with RoHS.

❑ STANDARD SPECIFICATIONS

Part Number	AHCO7050C		
Dimension (mm)	7.0 x 5.0 x 2.0		
Frequency Range	75.000 MHz ~ 212.500 MHz		
Frequency Stability vs Operating Temperature	±25ppm, ±50ppm, ±100ppm (Over all conditions)		
Operating Temperature Range	-20°C ~ +70°C (-40°C ~ +85°C extended)		
Storage Temperature Range	-55°C ~ +125°C		
Supply Voltage	3.3±0.3VDC		
Current Consumption	50mA max.	65mA max.	75mA max.
	75.0 ≤ fo ≤ 125.0MHz	125.0 < fo ≤ 165.0MHz	165.0 < fo ≤ 212.5MHz
Output Level	CMOS		
Output Load	15pF max.		
Symmetry	45% to 55% (50%Vcc level)		
Rise / Fall Times	3.0ns max. (10 ~ 90%Vcc level)		
Output "0" Level (Vol)	10%VCC max.		
Output "1" Level (Voh)	90%VCC min.		
Aging	±5ppm max. (@25°C±3°C) / 1st year		

NOTE: Please consult us for customized products not given above specifications.

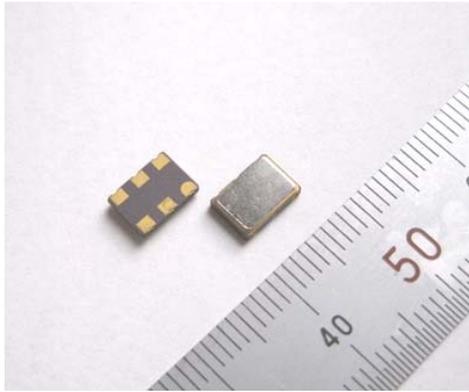❑ OUTLINE DRAWINGS   Dimensions in mm. Do not scale.
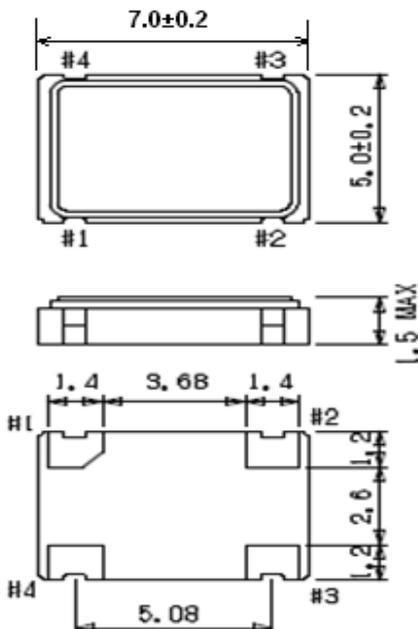
Pin Connections	
# 1	Output Enable
# 2	GND
# 3	Output
# 4	Vdd

Function	
# 1 input	# 3 output condition
H	Output
Open	Output
L	High Z

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AHCO7050D

HIGH FREQUENCY LVDS OUTPUT SMD CLOCK OSCILLATOR

The AHCO7050D is LVDS output level SMD clock oscillator with high frequecy range 62.500MHz to 212.500MHz. Ceramic package and metal lid by seam sealing has extreamly accuracy and reliability.
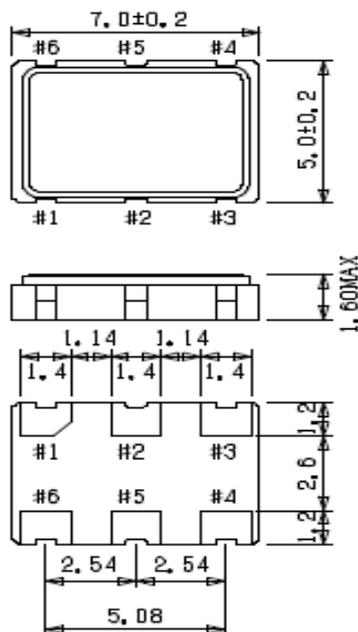
❑ FEATURES

· Low Jitter and Tri-State function.
· Can be mounted to PCB using a lead free solder reflow process.
· Complied with RoHS.

❑ STANDARD SPECIFICATIONS

Part Number	AHCO7050P
Dimension (mm)	7.0 x 5.0 x 1.6
Frequency Range	62.500 MHz ~ 212.500 MHz
Frequency Stability vs Operating Temperature	±25ppm, ±50ppm, ±100ppm (All over conditions)
Operating Temperature Range	-20°C ~ +70°C (-40°C ~ +85°C extended)
Storage Temperature Range	-55°C ~ +125°C
Supply Voltage	3.3VDC±5%
Current Consumption	70mA max.
Output Level	LVDS
Output Load	100Ω (Output - Output N)
Symmetry	45% to 55% (at cross point)
Rise / Fall Times	1.0ns max. (20 ~ 80% of amplitude)
Output "H" Level (Voh)	+2.215V ~ +2.420V
Output "L" Level (Vol)	+1.470V ~ +1.475V
Differential Output Voltage	0.33V Typ.
	1.25V Typ.
RMS Jitter	1.0ps max. (12kHz ~ 20MHz band)
Aging	±5ppm max. (@25°C±3°C) / 1st year

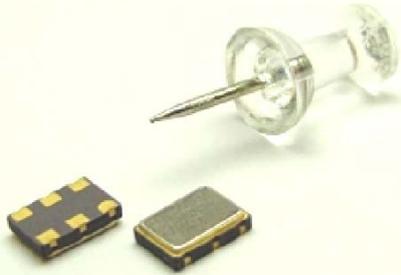NOTE: Please consult us for customized products not given above specifications.

❑ OUTLINE DRAWINGS   Dimensions in mm. Do not scale.

Pin Connections	
# 1	Output Enable
# 2	N.C.
# 3	GND
# 4	Output
# 5	Output N
# 6	Vdd

Function	
# 1 input	# 4, # 5 output condition
H	Output
Open	Output
L	High Z

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AHCO7050P

HIGH FREQUENCY LV-PECL OUTPUT SMD CLOCK OSCILLATOR

RoHS COMPLIANT 2002/95/EC

The AHCO7050P is LV-PECL output level SMD clock oscillator with high frequecy range 62.500MHz to 212.500MHz. Ceramic package and metal lid by seam sealing has extreamly accuracy and reliability.
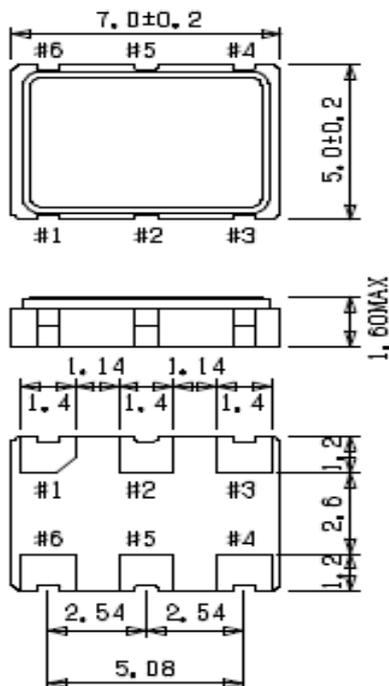
❑ FEATURES

- Low Jitter and Tri-State function.
- Can be mounted to PCB using a lead free solder reflow process.
- Complied with RoHS.

❑ STANDARD SPECIFICATIONS

Part Number	AHCO7050P
Dimension (mm)	7.0 x 5.0 x 1.6
Frequency Range	62.500 MHz ~ 212.500 MHz
Frequency Stability vs Operating Temperature	±25ppm, ±50ppm, ±100ppm (All over conditions)
Operating Temperature Range	-20°C ~ +70°C (-40°C ~ +85°C extended)
Storage Temperature Range	-55°C ~ +125°C
Supply Voltage	3.3±0.3VDC
Current Consumption	80mA max.
Output Level	LV-PECL
Output Load	50Ω to VDD-2.0V
Symmetry	45% to 55% (at cross point)
Rise / Fall Times	1.0ns max. (20 ~ 80% of amplitude)
Output "H" Level (Voh)	+2.215V ~ +2.420V
Output "L" Level (Vol)	+1.470V ~ +1.475V
RMS Jitter	1.0ps max. (12kHz ~ 20MHz band)
Aging	±5ppm max. (@25°C±3°C) / 1st year

NOTE: Please consult us for customized products not given above specifications.

❑ OUTLINE DRAWINGS   Dimensions in mm. Do not scale.

Pin Connections	
# 1	Output Enable
# 2	N.C.
# 3	GND
# 4	Output
# 5	Output N
# 6	Vdd

Function	
# 1 input	# 4, # 5 output condition
H	Output
Open	Output
L	High Z

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