

HCMOS/TTL COMPATIBLE SURFACE-MOUNT PROGRAMMABLE CRYSTAL CLOCK OSCILLATOR



7.0 x 5.0 x 1.6mm

AP7S



FEATURES:

- Performance comparable to fixed frequency oscillator
- Lowest peak-to-peak jitter
- Low supply current
- Short lead time
- Suitable for mass production
- Alternative to long lead-time XO's

For Small Quantities, Delivery Time is 1-5 days

ELECTRICAL SPECIFICATIONS:

3.3V, 2.5V OPERATION		Unit	Minimum	Typical	Maximum
Characteristics					
Frequency Range	3.3V	MHz	10	--	200
	2.5V	MHz	10	--	166
Operation Temp. Range (See Options)		°C	0	--	+70
Storage Temp. Range (See Options)		°C	-55	--	125
Overall Frequency Stability * (See Options)		ppm	-100	--	100
Input Voltage (Operating Vdd)		V	2.97	3.3	3.63
		V	2.25	2.5	2.75
Input Current	3.3V	mA	--	--	20
	2.5V	mA	--	--	30
Symmetry at 1/2 Vdd		%	45	50	55
Rise and fall time (Tr/Tf)**		nSec	--	2.5	3.5
Output Voltage					
	VOH	V	--	--	Vdd-0.4min
VOL	V	0.4V max	--	--	--
Start-up Time		msec	--	--	10
Tri-state Function (Input to pin 1)			pin 1 : High or Open , pin 3 : Enable		
			pin 1 : Low , pin 3 : Disable		
Jitter peak-to-peak		pSec	--	50	100
Phase Jitter (RMS, 12kHz to 20MHz)		pSec	--	2.5	--
Output Type		--	CMOS		

* Inclusive of calibration @25°C, operating temperature range, input voltage variation, load variation, aging, shock, and vibration.

** Transition times are measured between 10% and 90% of Vdd with an output load of 15 pf.

OPTIONS & PART IDENTIFICATION:

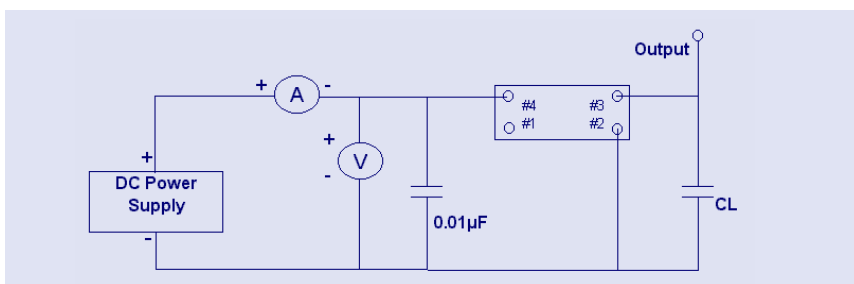
(Left blank if standard)

AP7S□-Frequency-□-□-□

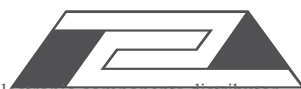
Supply Voltage		Operating Temp.		Freq. Stability		Packaging	
Blank*	3.3 V	I	0°C to +50°C	J(**)	±20ppm	Blank	Bulk
1	2.5 V	D	-10°C to +60°C	R	±25ppm	T	Tape and Reel
*3.3V : Standard		E	-20°C to +70°C	K	±30ppm		
		F	-30°C to +70°C	H	±35ppm		
		N	-30°C to +85°C	B	±40ppm		
		L	-40°C to +85°C	C	±50ppm		

* Available for I, D, or E temp options only.
Contact ABRACON for EJ or LR options. (Availability limited)

TEST CIRCUIT:



ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 1.04.08**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

HCMOS/TTL COMPATIBLE SURFACE-MOUNT PROGRAMMABLE CRYSTAL CLOCK OSCILLATOR



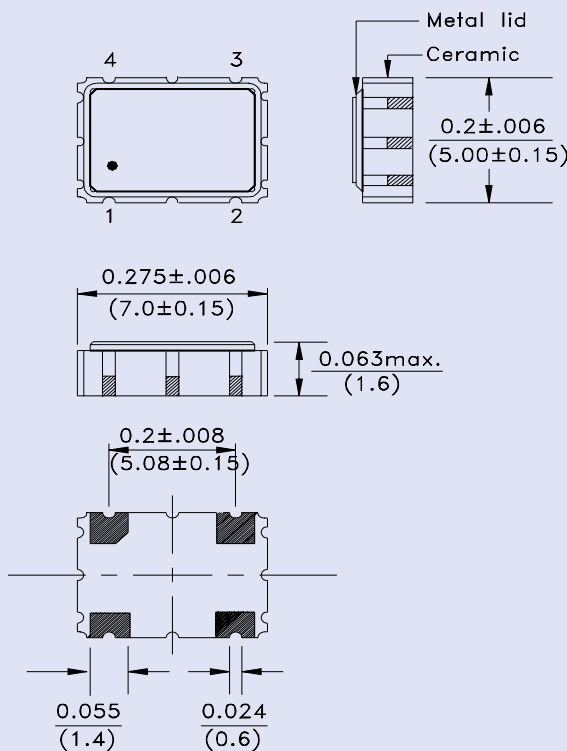
7.0 x 5.0 x 1.6mm

AP7S



RoHS
Compliant

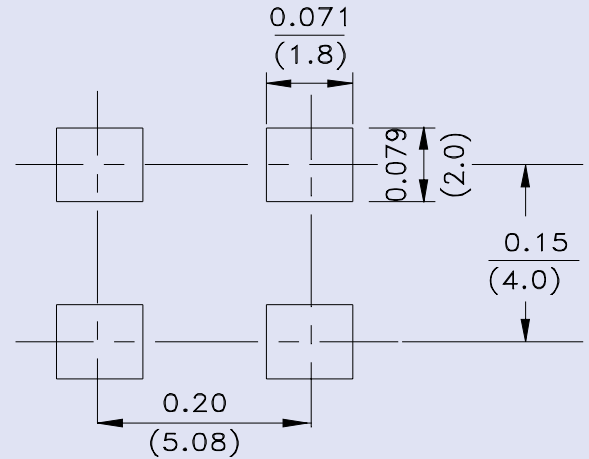
OUTLINE DRAWING:



Bottom view

Dimensions: Inches (mm)

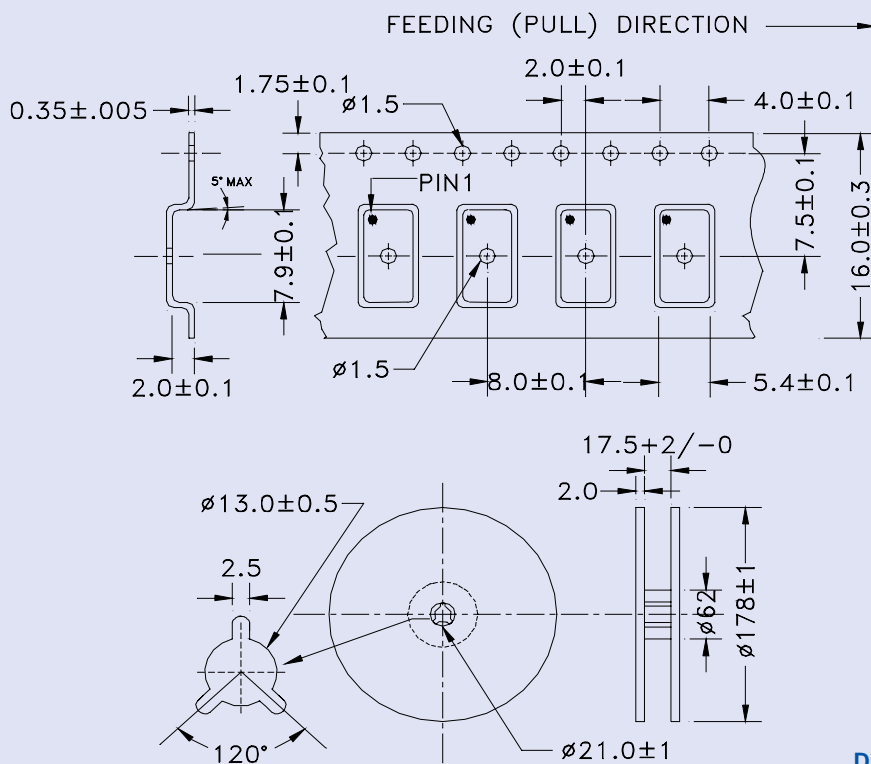
Recommended land pattern



PIN	CONNECTION
# 1	OE
# 2	GND/CASE
# 3	OUTPUT
# 4	VDD

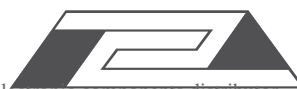
Note: It is recommended to use an approximately 0.01uF bypass capacitor between PIN 2 and 4.

TAPE & REEL:



Dimensions: mm

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 1.04.08**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com