

# SMD TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR



7.0 X 5.0 X 2.5mm

**ASTX-H08**



## FEATURES:

- Compact and low in height
- IR reflow possible
- Suitable for high-density SMT
- Low phase noise

## APPLICATIONS:

- Cellular and cordless phones
- Standard OSC for exact equipment
- Mobile communication equipment
- Portable radio equipment and music player

## STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	ASTX-H08 Series
Frequency Range	2.50MHz to 170.000MHz
Standard Frequencies	10.0, 12.8, 13.0, 14.4, 16.0, 16.384, 19.2, 19.440, 19.680, 20.0, 38.880, 77.760, 155.520MHz
Operating Temperature	- 30° C to + 75° C (See Table 1 for options)
Storage Temperature	- 50° C to + 100° C
Freq. Tolerance @ 25° C	±3ppm
Freq. Stability vs. Temperature	±2.5ppm standard (See Table 1 for options)
vs. Supply Voltage	±0.5ppm max. / Vdd ± 5%
vs. Aging @ 25° C	±1ppm/1st year
vs. Supply Voltage	±0.3ppm (± 5% change)
vs. Load	±0.3ppm (± 10% change)
vs. Reflow	±1ppm max: 1 reflow and measured 24 hours afterwards
Supply Voltage	3.3 V (See options)
Start-Up Time	2msec typical
Output Voltage level (Vdd)	Logic "1" 2.4V min.; Logic "0" 0.4V max
Start-up Time	10ms max.
Rise and Fall Time	10nsec. typ. 20% « 80% waveform
Duty cycle (symmetry)	50% ± 10% @ 50Vdd (see option)
Current consumption	30mA max. Frequency dependent
Start-up time	10msec max.
Output load	15pF
Output format	AC block, DC coupled
Output wave form	Square wave
Phase Noise	-72 dBc/Hz @ 10Hz, -110 dBc/Hz @ 100Hz, -125 dBc/Hz @ 1KHz, -132 dBc/Hz @ 10KHz, -125 dBc/Hz @ 100KHz

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

**ASTX - H08 - Frequency - [ ] - [ ] - [ ]**

Frequency
XX.XXXXXMHz

Supply Voltage	
Blank	3.3V
A	2.8V
B	3.0V
C	5V

Packaging	
Blank	Bulk
T	Tape and Reel

Temperature and Frequency Stability					
	±0.5ppm	±1.0ppm	±1.5ppm	±2.0ppm	±2.5ppm
0°C to +50°C	D5	D10	D15	D20	D25
-10°C to +60°C	*E5	E10	E15	E20	E25
-20°C to +70°C		F10	F15	F20	F25
-30°C to +75°C		G10	G15	G20	<b>G25</b> ← Standard
-40°C to +85°C		H10	H15	H20	H25

ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



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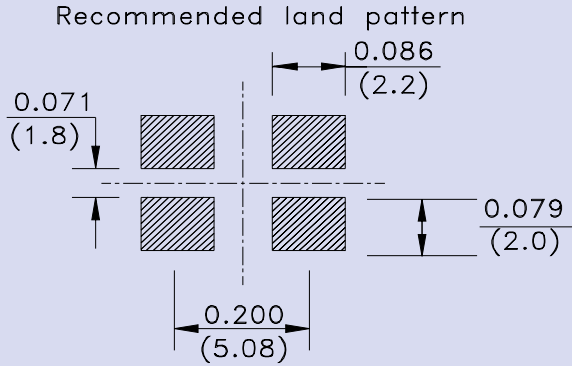
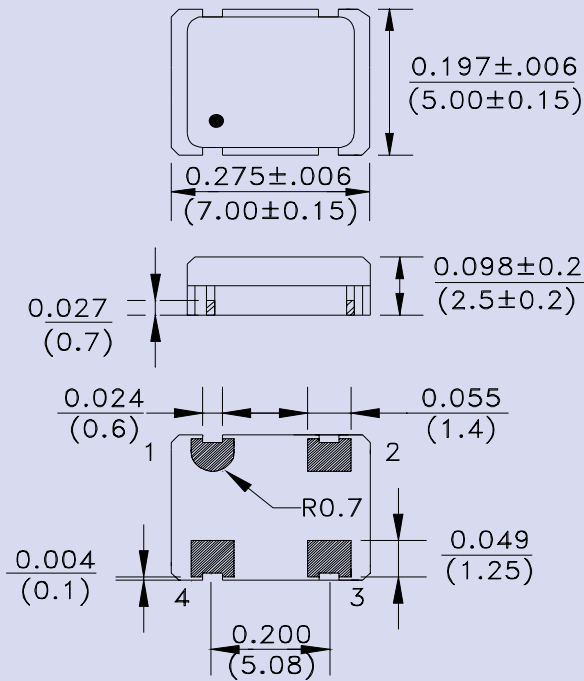
ASTX-H08



**RoHS**  
Compliant

## OUTLINE DRAWING:

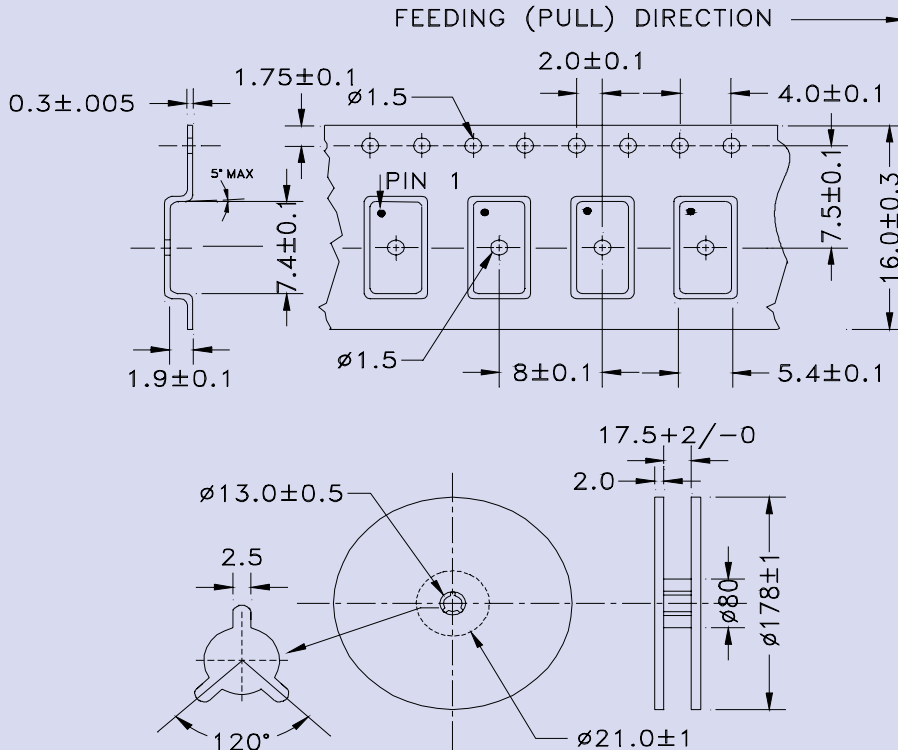
Dimensions: Inches (mm)



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

PIN	FUNCTION
1	NC
2	GND
3	Output
4	Vdd

## TAPE & REEL:



Dimensions: mm