

TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR



5.0 X 3.2 X 1.5mm

ASTX-09



RoHS
Compliant

FEATURES:

- Compact and low in height.
- Low current consumption.
- Suitable for high-density SMT.
- Vc function corresponds to PLL circuits.
- IR reflow possible.

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-09
Frequency	10.000MHz to 44.545MHz
Standard Frequencies	12.8MHz, 13.0MHz, 14.4MHz, 15.36MHz, 16.000MHz, 16.384MHz, 16.8MHz, 19.2MHz, 19.440MHz, 19.680MHz, 19.8MHz, 26.0MHz
Operating Temperature	- 30° C to + 75° C (See Table 1 for options)
Storage Temperature	- 40° C to + 85° C
Freq. Stability vs. Operating Temp.	±2.5ppm standard (See Table1 for options)
Freq. Stability vs. Aging	± 1ppm/1st year
Freq. Stability vs. Supply Voltage	±0.2ppm (± 5% change)
Freq. Stability vs. Load	±0.2ppm (± 10% change)
Supply Voltage (Vdd)	3.0V Standard (See options)
Supply Current	2mA max
Output Type	Clipped Sine
Output Voltage	0.8Vp-p min
Output Load	10 kohm // 10 pF
Pullability	± 8ppm min
Phase Noise	-110dBc/Hz @ 100KHz offset; -130dBc/Hz @ 1KHz offset

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASTX - 09 - - Frequency - -

	Supply Voltage (Vdd)
A	2.5V
Blank	3.0V
B	3.3V
C	5.0V

*3.0V : Standard

Packaging	
Blank	Bulk
T	Tape and Reel

(1,000 or 2,000pcs/reel)

Table 1: Frequency Stability vs Operating Temp.

	±1ppm	±1.5ppm	±2ppm	±2.5ppm	±3ppm	±4ppm	±5ppm
0°C-50°C	D10	D15	D20	D25	D30	D40	D50
-10°C to 60°C	E10	E15	E20	E25	E30	E40	E50
0°C to 70°C		F15	F20	F25	F30	F40	F50
-20°C to +75°C			G20	G25	G30	G40	G50
-30°C to 75°C				STD	H30	H40	H50
-40°C to 85°C					I30	I40	I50



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Technical drawing of a rectangular plate. The top view shows a rectangle with rounded corners. The dimensions are given as 0.126 ± 0.008 (3.2 $\pm$ 0.20) for the height and 0.20 ± 0.008 (5.0 $\pm$ 0.20) for the width. The side view shows the plate's thickness, which is 0.059 ± 0.004 (1.5 $\pm$ 0.10). The side view also shows four vertical lines, likely representing holes or features, with hatching indicating specific material or processing requirements.

Recommended land pattern

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

PIN	FUNCTION
1	GND
2	GND
3	Output
4	Vcc

Dimensions: Inches (mm)

FEEDING (PULL) DIRECTION

0.3±0.005

1.75±0.1

2.0±0.1

4.0±0.1

5.5±0.1

12.0±0.3

5° MAX

PIN 1

1.9±0.1

8.0±0.1

3.7±0.1

12.4+2/-0

1.6

1.78±1

120°

2.5

Ø13.0±0.5

Ø21.0±1

Ø80

Dimensions:

Dimensions: mm



ABRACON CORPORATION

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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www.DataSheet4U.com