

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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VOLTAGE CONTROLLED TEMPERATURE <u>COMPENSATED CRYSTAL OSCILLATOR</u>



ASVTX-09

RoHS Compliant

5.0 X 3.2 X 1.5mm

> 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 | ASVTX-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. +25°C | q. Stability vs. +25°C ± 0.5ppm standard (See option) | | | | |
| vs. Operating Temp. | ±2.5ppm standard (See Table1 for options) | | | | |
| vs. Aging | ± 1ppm/1st year | | | | |
| vs. Supply Voltage | ±0.2ppm (± 5% change) | | | | |
| vs. Load | ±0.2ppm (± 10% change) | | | | |
| Voltage Control Range (Vcc) | 1.5V ±1.0V standard (See options) | | | | |
| Supply Voltage (Vdd) | 3.0V ± 5% 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 | | | | |
| Transfer Function | Positive | | | | |
| Phase Noise | -110dBc/Hz @ 100KHz offset; -130dBc/Hz @ 1KHz offset | | | | |

> OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

Frequency Stability Control Supply Voltage (Vdd) Voltage (Vcc) vs +25°C 2.5V±5% 1.25V±1.0V Blank* Α ±0.5ppm Blank* 3.0V±5% 1.5V±1.0 ±1.5ppm В 3.3V±5% 1.65V± 1.5V 2.5V± 2.0V * Standard 5.0V±5% *3.0V±5% : 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 | | | | | 130 | 140 | 150 |

ASVTX - 09 - □ - **Frequency -** □ - □□□ - □





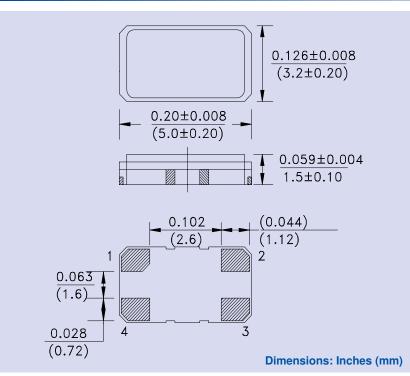
VOLTAGE CONTROLLED TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR

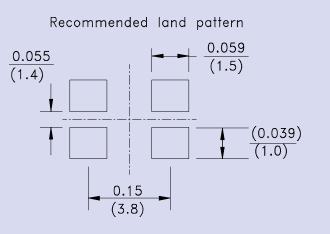
ASVTX-09





OUTLINE DRAWING:





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

| PIN | FUNCTION | | | |
|-----|----------|--|--|--|
| 1 | Vcc | | | |
| 2 | GND | | | |
| 3 | Output | | | |
| 4 | Vdd | | | |

> TAPE & REEL:

