

TTL / CMOS • HALF-SIZE DIP • 5 Vdc or 3.3 Vdc

VOLTAGE-CONTROLLED CRYSTAL OSCILLATORS

AHVX1025 and AHVX1025L



FEATURES:

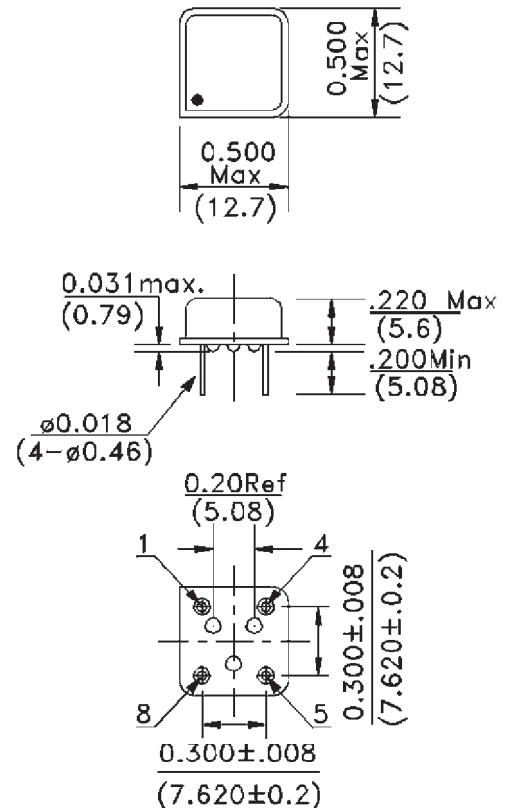
- 8-Pin DIP Metal Package.
- Tight Symmetry.
- Tight Stability and Wide Pull Range.
- 5Vdc or 3.3 Vdc.

APPLICATIONS:

- Phase Locked Loops (PLLs)
- Reference Signal Tracking.
- Clock Recovery.
- Synthesizers.

STANDARD SPECIFICATIONS

PARAMETERS	AHVX 1025	AHVX 1025 L
Frequency Range (F_0)	1.0 MHz - 52.0 MHz (**)	
Operating Temperature (T_{OPR})	0°C to + 70°C (See Options)	
Storage Temperature (T_{STO})	-55°C to + 125°C	
Frequency Stability ($\Delta F / F_0$)	± 50 ppm max	
Supply Voltage (V_{DD})	5 Vdc $\pm 5\%$	3.3 Vdc $\pm 5\%$
Input Current (I_{DD})	20 mA max. for $F \leq 30$ MHz 35 mA max. for $F \leq 52$ MHz	
Duty Cycle or Symmetry	45 / 55% max. @ 1/2 V_{DD}	
Rise and Fall Times (T_R / T_F)	6 ns max.	
Output Load	15 pF or 2TTL	
Output Voltage (V_{OH}) (V_{OL})	0.9 * V_{DD} min. 0.4 Vdc max.	
Transfer Function	Positive	
Voltage Control (V_C)	2.5 Vdc ± 2.0 Vdc	1.65 Vdc ± 1.35 V
Frequency Deviation	± 100 ppm min. (See Options)	
Linearity	$\pm 10\%$ max.	
Input Impedance	50 k Ω min.	



(*) Inclusive of Calibration tolerance, aging, supply voltage, shock, vibrations, and operating temperature.

(**) Higher frequencies and pulling available.

For test circuit, waveforms, please see page 67.

Environmental and mechanical specifications on page 68, Group 1.

Marking, see page 79.

ORDERING OPTIONS

AHVX1025X - Frequency - Temperature - Overall Frequency Stability - Pulling - Value Added

Blank or L

XX.XXXXX MHz

-D for -10°C to +60°C
-E for -20°C to +70°C
-F for -30°C to +70°C
-N for -30°C to +85°C
-L for -40°C to +85°C

-J for ± 20 ppm max
-R for ± 25 ppm max
-K for ± 30 ppm max
-H for ± 35 ppm max.

-N15 ± 150 ppm min.

-G Gull Wing*
-G2 Gull Wing *
-QXX (Trimmed Leads) *

* Found on Page 73.

PIN NO.	FUNCTION
1	Voltage Control V_C
4	GND / Case
5	Output
8	V_{DD}

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED

NOTE: Left blank if standard • All specifications and markings subject to change without notice

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