

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

VOLTAGE-CONTROLLED CRYSTAL OSCILLATORS

AHVX1025 and AHVX1025L



FEATURES:

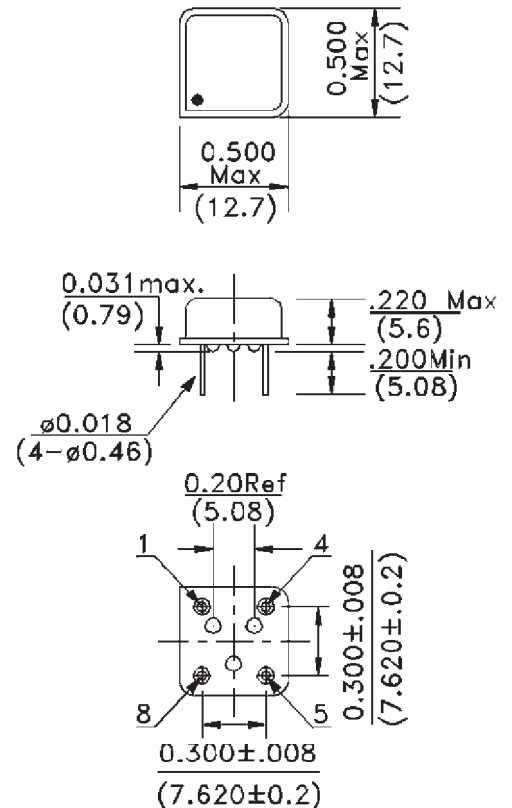
- 8-Pin DIP Metal Package.
- Tight Symmetry.
- Tight Stability and Wide Pull Range.
- 5Vdc or 3.3 Vdc.

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 (ΔF/ F ₀)	± 50 ppm max	
Supply Voltage (V _{DD})	5 Vdc ± 5%	3.3 Vdc ± 5%
Input Current (I _{DD})	20 mA max. for F ≤ 30 MHz 35 mA max. for F ≤ 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	± 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.

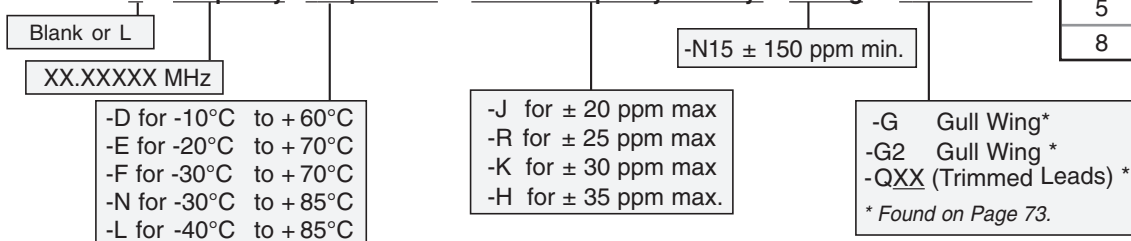
For test circuit, waveforms, please see page 67.

Environmental and mechanical specifications on page 68, Group 1.

Marking, see page 79.

ORDERING OPTIONS

AHVX1025 X - Frequency - Temperature - Overall Frequency Stability - Pulling - Value Added



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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