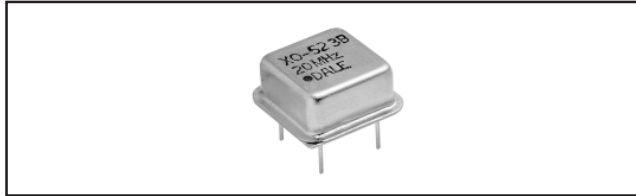


# Clock Oscillators

3.3 Volt, 1.0MHz to 70.0MHz



## FEATURES

- HCMOS/TTL compatible.
- 3.3VDC crystal oscillator.
- Industrial temperature optional.

## ELECTRICAL SPECIFICATIONS

**Operating Temperature Range:** 0°C to + 70°C.  
(- 40°C to + 85°C optional.)

**Frequency Stability:** .01% Standard (.0025% and .005% optional).

**Input Voltage:** + 3.3VDC ± 0.3V.

**Enable Input Current:** 2.2V minimum.

**Disable Input Voltage:** 0.8V maximum.

**Output Load:** 15pF or 2 TTL loads from 1.0 to 24.0MHz,  
15pF load for 24.1 to 70.0MHz.

## MECHANICAL SPECIFICATIONS

**Marking Ink:** Epoxy, solvent resistant.

**Hermetically Sealed Package:** Leak rate less than  
2 x 10<sup>-8</sup> atmosphere cc/sec. of helium.

**Terminal Solderability:** A minimum of 95% coverage after  
solder dip.

## ENVIRONMENTAL SPECIFICATIONS

**Temperature Cycle:** - 55°C to + 85°C, 3 cycles.

**Shock:** 1000g, 0.35 milliseconds, 1/2 sine wave, 3 shocks  
each plane.

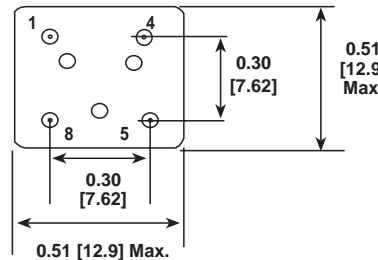
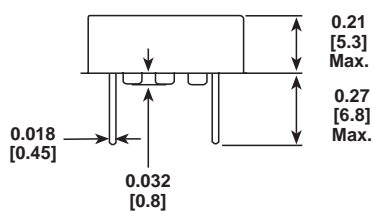
**Vibration:** .06 D.A., 10 - 55Hz, 20g, 55 - 2000Hz.

**Humidity:** 85% relative humidity at + 85°C, 240 hours.

## STANDARD ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE (MHz)	INPUT CURRENT (mA)	WAVEFORM SYMMETRY 1.65V OR 50%Vdd	RISE AND FALL TIME (Max.) (nS)	"ZERO" LEVEL 10%Vdd (Typ. Max.)	"ONE" LEVEL 90%Vdd (Typ. Min.)
1.0 to 23.999	10	40/60	10.0	0.1/0.4	3.3/2.7
24.0 to 49.999	20	40/60	10.0	0.1/0.4	3.3/2.7
50.0 to 70.0	30	40/60	5.0	0.1/0.4	3.3/2.7

## DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]



PIN	CONNECTION
1	N.C. or E/D
4	Ground
5	Output
8	+ 3.3VDC
ENABLE/DISABLE FUNCTION	
*Pin 1 E/D	Pin 5 Output
Open	Active
High (1)	Active
Low (0)	High Z

\*An internal pull-up resistor is connected to Pin 1 allowing active output if Pin 1 is left open.

## HOW TO ORDER

<b>XO-523</b> MODEL	<b>B</b> FREQUENCY STABILITY	<b>R</b> OTR	<b>E</b> ENABLE/DISABLE	<b>40M</b> FREQUENCY/MHz
	AA = .0025% (25PPM) A = .005% (50PPM) B = .01% (100PPM)	Blank = 0°C to + 70°C R = - 40°C to + 85°C	Blank = Pin 1 open E = Disable to Tristate	