Clock Oscillators

1.0MHz to 100.0MHz



FEATURES

- HCMOS/TTL compatible.
- Enabled output optional.
- Industrial temperature optional.

ELECTRICAL SPECIFICATIONS

Operating Temperature Range: 0°C to + 70°C. (- 40°C to + 85°C optional for .005% ("A") and .01% ("B") Stability's.)

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

Input Voltage: + 5.0VDC ± 0.5V.

Enable Input Voltage: 2.2V minimum.

Disable Input Voltage: 0.8V maximum.

Output Load: 50pF or 10 TTL loads from 1.0 to 40.0MHz, 15pF or 10 TTL loads from 40.1 to 100.0MHz.

MECHANICAL SPECIFICATIONS

Marking Ink: Epoxy, solvent resistant.

Hermetically Sealed Package: Leak rate less than 2 x 10^{-8} 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 millisecond, 1/2 sine wave, 3 shocks each plane.

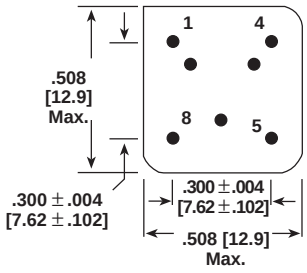
Vibration: .06 D.A., 10 - 55Hz, 20g, 55 - 200Hz.

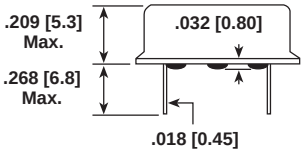
Humidity: 85% relative humidity at + 85°C, 240 hours.

STANDARD ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE (MHz)	INPUT CURRENT (mA) (Max.)	WAVEFORM SYMMETRY 2.5V OR 50%Vdd	RISE AND FALL TIME (nS) (Typ. Max.)	"ZERO" LEVEL 10%Vdd (Typ. Max.)	"ONE" LEVEL 90%Vdd (Typ. Min.)
1.0 to 23.999	20	40/60	5/10	0.1/0.5	5.0/4.5
24.0 to 50.0	30	40/60	5/10	0.1/0.5	5.0/4.5
50.001 to 70.0	40	40/60	5/10	0.1/0.5	5.0/4.5
70.001 to 100.0	60	40/60	5/10	0.1/0.5	5.0/4.5

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millmeters]





PIN	CONNECTION
1	N.C. or E/D
4	Ground
5	Output
8	+ 5VDC

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

XO-52 / MODEL

B / FREQUENCY STABILITY
- AA = .0025% (25PPM)
- A = .005% (50PPM)
- B = .01% (100PPM)
- Standard

R / OTR
- Blank = 0°C to + 70°C
- R = - 40°C to + 85°C

E / ENABLE/DISABLE
- Blank = Pin 1 open
- E = Disable to Tristate

40M / FREQUENCY/MHz