



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 $\pm$ 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
 2×10^{-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 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

XO-523 MODEL	B FREQUENCY STABILITY	R OTR	E ENABLE/DISABLE	40M 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	