

Surface Mount Clock Oscillators

Hybrid Crystal 1.8MHz to 70.0MHz



FEATURES

- HCMOS/TTL compatible.
- Industrial temperature range optional.

ELECTRICAL SPECIFICATIONS

Operating Temperature: 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: + 3.3VDC ± 0.3V.

Enable Input Voltage: 2.0V minimum.

Disable Input Voltage: 0.5V maximum.

Output Load: 50pF or 10 TTL loads.

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 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

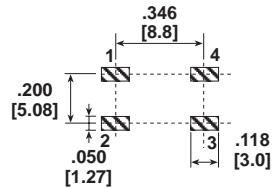
FREQUENCY RANGE (MHz)	INPUT CURRENT (mA) (Max.)	WAVEFORM SYMMETRY @ 50%Vdd	RISE AND FALL TIME (nS) (Max.)	“ZERO” LEVEL Vdd	“ONE” LEVEL Vdd
1.8 to 19.999	10	45/55	10	10%	90%
20.0 to 49.999	20	45/55	6	10%	90%
50.0 to 70.0	35	45/55	6	10%	90%

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

PIN	CONNECTION
1	N.C. or E/D
2	Ground
3	Output
4	3.3VDC
ENABLE/DISABLE FUNCTION	
*Pin 1 E/D	Pin 3 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.

SUGGESTED SOLDER PAD LAYOUT



PACKAGING

24mm wide tape and reel packaging for automatic assembly.

1000 pieces per reel.

HOW TO ORDER

XOSM-553 MODEL	B FREQUENCY STABILITY	R OTR	E ENABLE/DISABLE	50M FREQUENCY/MHz
	A = .005% (50PPM) B = .01% (100PPM) Standard	Blank = Standard R = - 40°C to + 85°C	Blank = Pin 1 open E = Disable to Tristate	