

## Surface Mount Clock Oscillators

1.0MHz to 100.0MHz



### FEATURES

- HCMOS/TTL compatible.
- Enabled output optional.
- Industrial temperature 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:** + 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.

**Hermetically Sealed Package:** Leak rate less than  $2 \times 10^{-8}$  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.

### MECHANICAL SPECIFICATIONS

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

STANDARD ELECTRICAL SPECIFICATIONS					
FREQUENCY RANGE (MHz)	INPUT CURRENT (mA) (Max.)	WAVEFORM SYMMETRY 2.5 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 millimeters]**

Standard PIN Orientation

- 85 PIN Orientation

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**

<b>XOSM-52</b> MODEL	<b>B</b> FREQUENCY STABILITY AA = .0025% (25PPM) A = .005% (50PPM) B = .01% (100PPM) Standard	<b>R</b> OTR Blank = 0°C to + 70°C R = - 40°C to + 85°C	<b>E</b> ENABLE/DISABLE Blank = Pin 1 open E = Disable to Tristate
PIN ORIENTATION Blank = Standard - 85 = 90° Orientation	<b>40M</b> FREQUENCY/MHz		