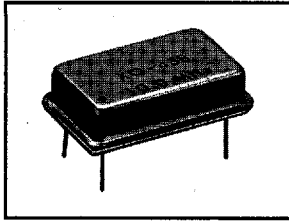




# MODEL XO-43B Clock Oscillators

**Hybrid Crystal, Resistance Welded Metal Package  
Low Profile, 250 KHz to 60 MHz**



**FEATURES**

- Able to withstand flow soldering
- Wide range of standard frequencies available from stock (listed below)
- Hermetically sealed package
- Low profile .225" [5.72] maximum seating height
- Metal Case - corrosion resistant and grounded for EMI shielding
- Glass standoffs for spacing from mounting surface

STANDARD ELECTRICAL SPECIFICATIONS					
FREQUENCY RANGE	INPUT CURRENT (mA)	WAVEFORM SYMMETRY AT 1.4 VDC	TTL OUTPUT RISE & FALL TIME (From Zero to One Level)	"ZERO" LEVEL SINKING 16 mA	"ONE" LEVEL SOURCING 0.4 mA
250 KHz to 3.999 MHz	65 max.	55/45	15 nS max.	0.4 volts max.	2.4 volts min.
4.0 MHz to 24.999 MHz	40 max.	60/40*	10 nS max.	0.4 volts max.	2.4 volts min.
25.0 MHz to 60.0 MHz	50 max.	60/40*	6 nS max.	0.4 volts max.	2.4 volts min.

\* 55/45 Available

**ELECTRICAL SPECIFICATIONS**

**Input Voltage:** + 5 VDC ± 0.5 V.  
**Frequency Range:** 250 KHz to 60 MHz.  
**Operating Temperature Range:** 0°C to 70°C.  
**TTL Compatible:** Will drive 1-10 TTL Gates.

**MECHANICAL SPECIFICATIONS**

**Hermetically Sealed Package:** Leak rate less than  $2 \times 10^{-8}$  atmosphere cc/sec. of helium.  
**Marking Ink:** Epoxy, solvent resistant.  
**Solvent Resistance:** Isopropyl alcohol, Trichloroethane, Freon TMC.  
**Terminal Solderability:** Per MIL-STD-202, Method 208C.  
**Package:** Cold Rolled Steel (CRS), Nickel-Plated Base with Resistance Welded Stainless Steel Cover.

**ENVIRONMENTAL SPECIFICATIONS**

**Temperature Cycle:** - 55°C to + 85°C, 3 cycles.  
**Shock:** 1000 G's 0.35 millisecond, 1/2 sine wave, 3 shocks each plane.  
**Vibration:** .06 D.A., 10-55 Hz, 35 G, 55-2000 Hz.  
**Humidity:** 85% relative humidity at 85°C, 240 hours.

**STOCKING FREQUENCIES (MHz)**

**"B" accuracy only**

1.0	4.9152	10.0	19.6608	32.0
1.2288	5.0	12.0	20.0	40.0
2.0	5.0688	16.0	24.0	50.0
2.4576	6.0	16.384	25.0	
4.0	8.0	18.432	30.0	

**DIMENSIONAL CONFIGURATIONS** (Numbers in brackets indicate millimeters)

**Schematic**

PIN CONNECTION	
1	N. C.
7	Ground
8	Output
14	+ 5 VDC

Pin #1 is identified by square corner. Design subject to change without notice.

**MARKING**

- Model
- Frequency
- Pin identifier
- Dale

**HOW TO ORDER**

<b>XO-43</b> MODEL	<b>B</b> FREQ. ACCURACY (All conditions) A = ± .005% (± 50PPM) B = ± .01% (± 100PPM)	<b>- 59</b> SYMMETRY BLANK = Std. Symmetry - 59 = 55/45 Symmetry	<b>10</b> FREQ./MHZ
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Contact factory for other models, logic families, stabilities and temperature ranges.