

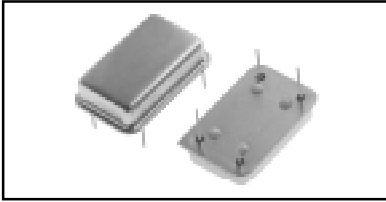
# MODELS XO-43B and XO-43BH

Vishay Dale



## Clock Oscillators

Hybrid Crystal  
250KHz to 60MHz



### FEATURES

- TTL compatible.
- Industrial temperature optional.
- Hermetically sealed package.

### STANDARD ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE	INPUT CURRENT (mA)	WAVEFORM SYMMETRY @ 1.4 VDC	TTL OUTPUT RISE & FALL TIME (Max./Typ.)	"ZERO" LEVEL SINKING 16mA (Max./Typ.)	"ONE" LEVEL SOURCING 0.4mA (Min./Typ.)
250KHz - 3.999MHz	10 Max.	48/52	5nS/2nS	0.4/0.25	2.4/4.5
4.0MHz - 24.999MHz	40 Max.	40/60	10nS/5nS	0.5/0.25	2.4/3.5
25.0MHz - 60.0MHz	50 Max.	40/60	6nS/3nS	0.5/0.25	2.4/3.5

**NOTE:** Units below 4MHz (XO-43BH) are manufactured using a custom HCMOS IC optimized for TTL levels and loads.

### ELECTRICAL SPECIFICATIONS

- Operating Temperature:** 0°C to +70°C.  
**Frequency Stability:** .01% standard (.005% optional).  
**Input Voltage:** +5 VDC ± 0.5V.  
**Output Load:** 1 to 10 TTL loads.

### MECHANICAL SPECIFICATIONS

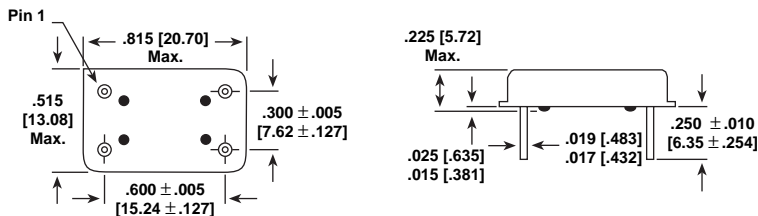
- Marking Ink:** Epoxy, solvent resistant.  
**Hermetically Sealed Package:** Leak rate less than  $2 \times 10^{-8}$  atmosphere cc/sec. of helium.

**Terminal Solderability:** A minimum of 95% coverage after solder dip.

### ENVIRONMENTAL SPECIFICATIONS

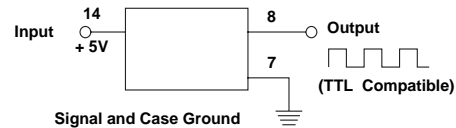
- Temperature Cycle:** -55°C to +85°C, 3 cycles.  
**Shock:** 1000g 0.35 millisecond, 1/2 sine wave, 3 shocks each plane.  
**Vibration:** .06 D.A., 10 - 55Hz, 20g, 55 - 2000Hz.

### DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]



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

### Schematic

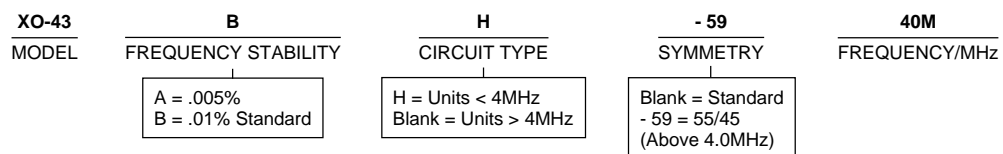


PIN	CONNECTION
1	N. C.
7	Ground
8	Output
14	+ 5 VDC

### PART MARKING

- Model
- Frequency
- Pin identifier
- Vishay Dale

### HOW TO ORDER



Contact factory for other models, frequencies, stabilities and temperature ranges.