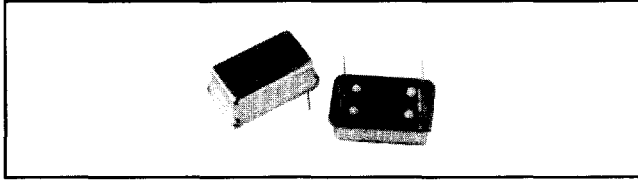




## Voltage Controlled Oscillators

Hybrid Crystal 1.0MHz to 45.0MHz



### FEATURES

- HCMOS/TTL compatible.
- Tight stability.
- Hermetically sealed package.

### ELECTRICAL SPECIFICATIONS

**Operating Temperature:** 0°C to + 70°C. (Contact factory for extended temperature range).

**Frequency Stability:** .01% Standard (.0025% + .005% optional).

**Control Voltage Range:** 0.5 to 4.5V.

**Input Voltage:** + 5VDC ± 0.5V.

**Output Load:** 15pF/10 TTL loads.

**Pulling Range:** - 1 (± 100PPM Min.), - 2 (± 200PPM Min.).

**Linearity:** ± 10%.

### MECHANICAL SPECIFICATIONS

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

**Hermetically Sealed Package:** Leak rate less than 2 x 10<sup>-8</sup> 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)	WAVEFORM SYMMETRY @ 1.4VDC	RISE AND FALL TIME From Zero to One (nS) (Max.)	"ZERO" LEVEL SINKING 16mA (Max.)	"ONE" LEVEL SOURCING 0.4mA (Min.)
1.0 to 24.0	30	40/60	5	0.4	2.4
24.1 to 30.0	40	40/60	5	0.4	2.4
30.1 to 45.0	50	40/60	5	0.4	2.4

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

Pin 1  
 .804 [20.4] Max.  
 .508 [12.9] Max.  
 .600 ± .005 [15.24 ± .127]  
 .300 ± .005 [7.62 ± .127]  
 .315 [8.0] Max.  
 .268 [6.8] Max.  
 .018 [0.45]

Output (TTL Compatible)  
 390 Ohm  
 1N916 or Equivalent  
 CL 15pF  
 Test Point  
 Oscillator  
 Power Supply  
 MA  
 V  
 14  
 8  
 1  
 7

PIN	CONNECTION
1	Control V
7	Ground
8	Output
14	+ 5VDC

### PART MARKING

- Model
- Frequency
- Pin identifier
- Vishay Dale

### HOW TO ORDER

XOVC-23 MODEL	B FREQUENCY/ STABILITY	- 1 PULLABILITY	27M FREQUENCY/MHz
	AA = .0025% (25PPM) A = .005% (50PPM) B = .01% (100PPM)	- 1 = ± 100PPM - 2 = ± 200PPM	

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