

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 \pm 0.5V.

Output Load: 15pF/10 TTL loads.

Pulling Range: - 1 (\pm 100PPM Min.), - 2 (\pm 200PPM Min.).

Linearity: \pm 10%.

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)	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.

.300 \pm .005 [7.62 \pm .127]

.600 \pm .005 [15.24 \pm .127]

.315 [8.0] Max.

.268 [6.8] Max.

.018 [0.45]

Output (TTL Compatible)

390 Ohm

1N916 or Equivalent

CL 15pF

Oscillator

Test Point

Power Supply

Power Supply

MA

V

14

8

7

1

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 \pm 100PPM - 2 \pm 200PPM	

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