



Full Size Voltage Controlled Crystal Oscillators



The XOVC-23 is a full size voltage controlled crystal oscillator designed primarily for use in phase locked loops, phase shift keying and other tele-communication applications such as ADSL and cable modem.

FEATURES

- 14 pin half size
- Industry standard
- Wide frequency range
- Low cost
- Resistance weld package
- Lead (Pb)-free terminations and RoHS compliant

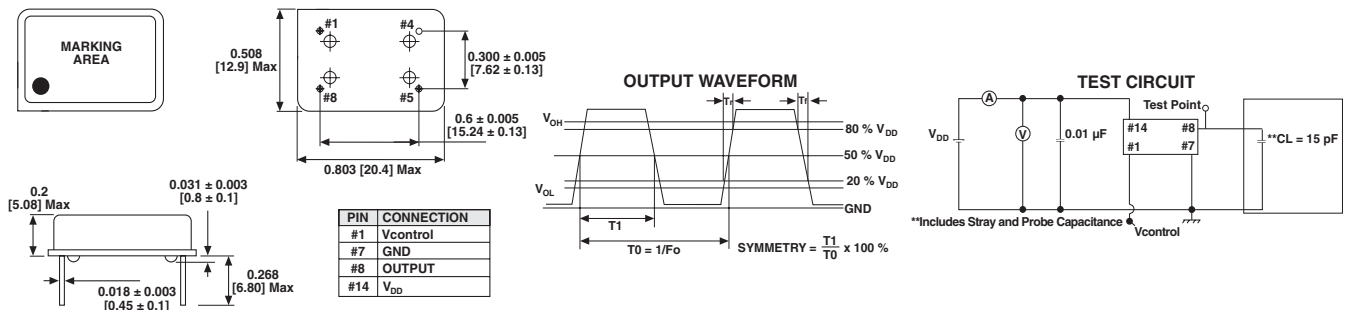


STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	XOVC-23
Frequency Range*	F_O		1 MHz ~ 40.00 MHz
Frequency Calibration		At 25 °C	± 15 ppm
Temperature Stability		Over T_{OPR}	± 15 ppm, ± 25 ppm, ± 50 ppm
Stability vs. power change		$V_{DD} \pm 5\%$	± 5 ppm
Stability vs. load change		15 pF ± 10 %	± 3 ppm
Pullability		Over Control Voltage Range	± 50 ppm, ± 100 ppm, ± 200 ppm
Control Voltage Range			0.5 ~ 4.5 V
Operating Temperature Range	T_{OPR}		0 °C ~ 70 °C (- 40 °C ~ + 85 °C option)
Storage Temperature Range	T_{STG}		- 55 °C ~ + 125 °C
Power Supply Voltage	V_{DD}		5.0 V ± 5 %
Aging (First Year)		25 °C ± 3 °C	± 5 ppm
Supply Current	I_{DD}	1.000 MHz to 23.999 MHz	15 mA Max
		24.000 MHz to 40.000 MHz	25 mA Max
Output Symmetry	Sym	At 1/2 V_{DD}	40/60 % (45/55 % Option)
Rise Time	T_r	20 % V_{DD} ~ 80 % V_{DD}	10 ns Max
Fall Time	T_f	80 % V_{DD} ~ 20 % V_{DD}	10 ns Max
Output Voltage	V_{OH}		90 % V_{DD} Min
	V_{OL}		10 % V_{DD} Max
Output Load			15 pF Max
Start-up Time		T_s	10 ms Max

*Frequency over 40.000 MHz, please consult factory

DIMENSIONS in inches [millimeters]

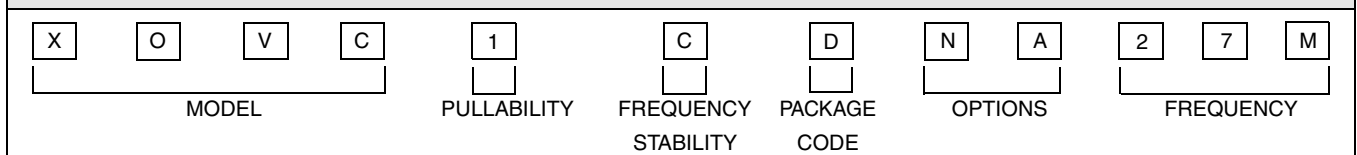


ORDERING INFORMATION

XOVC-23 MODEL	B FREQUENCY STABILITY	-1 PULLABILITY	27 M FREQUENCY/MHz	e2 JEDEC Lead (Pb)-free STANDARD
	AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm)	- 1 = ± 100 ppm - 2 = ± 200 ppm - 3 = ± 50 ppm		

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

GLOBAL PART NUMBER





Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.