



Half Size Clock Oscillator Enable/Disable



The XO-52 series oscillator is half size, has tri-state enable/disable controlled function. The metal package with pin 4 case ground acts as shielding to minimize EMI radiation.

FEATURES

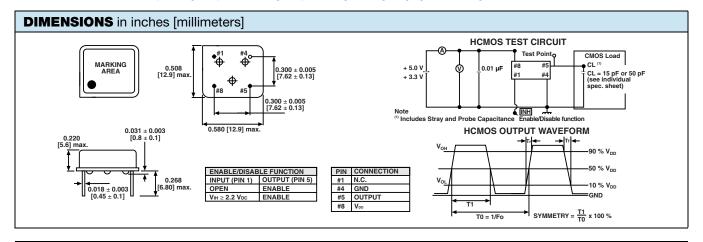
- Size: 8 pin half size
- · Industry standard
- Tri-state enable/disable
- Wide frequency range
- Low cost
- Resistance weld package
- 5 V
- Compliant to RoHS Directive 2002/95/EC



STANDARD ELECTRICAL SPECIFICATIONS								
PARAMETER	SYMBOL	CONDITION	VALUE					
requency range F _O		-	1.000 MHz to 100.000 MHz					
Frequency stability (1)		all conditions	± 25 ppm, ± 50 ppm, ± 100 ppm					
Operating temperature range	т —		0 °C to 70 °C					
Operating temperature range	T _{OPR}	-	- 40 °C to + 85 °C (option)					
Storage temperature range	Storage temperature range T _{STG}		- 55 °C to + 125 °C					
Power supply voltage	V_{DD}	-	5.0 V ± 10 %					
Aging (first year)		25 °C ± 3 °C	± 5 ppm					
		1.000 MHz to 23.999 MHz	20 mA max.					
Supply current		24.000 MHz to 49.999 MHz	30 mA max.					
	I _{DD}	50.000 MHz to 69.999 MHz	40 mA max.					
		70.000 MHz to 100.000 MHz	60 mA max.					
Output symmetry	Sym	at ¹ / ₂ V _{DD}	40 %/60 % (45 %/55 % option)					
Rise time t _r		20 % V _{DD} to 80 % V _{DD}	10 ns max.					
Fall time t _f		80 % V _{DD} to 20 % V _{DD}	10 ns max.					
Output voltage	V _{OH}	-	90 % V _{DD} min.					
Output voltage	V _{OL}	-	10 % V _{DD} max.					
	TTL load	-	1 TTL to 10 TTL					
Output load		-	to 50M: 50 pF					
Output load	HCMOS load	-	to 70M: 30 pF					
		-	to 100M: 15 pF					
Start-up time	t _s	-	10 ms max.					
Din 1 tri state function			pin 1 = H or open (output active at pin 5)					
Pin 1, tri-state function		-	pin 1 = L (high impedance at pin 5)					

Note

(1) Include: 25 °C tolerance, operating temperature range, input voltage change, aging, load change, shock vibration



Document Number: 35025 Revision: 24-Nov-10

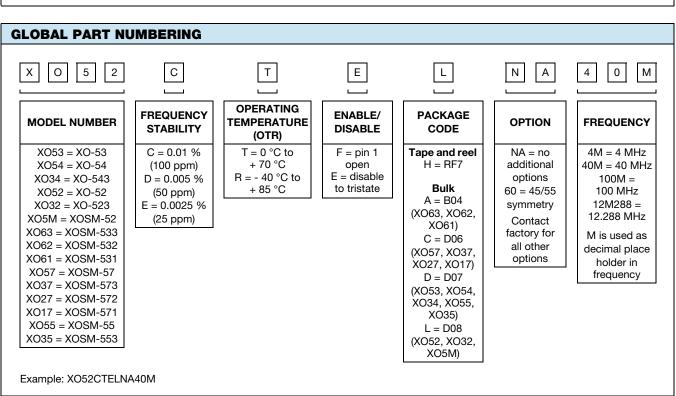
Vishay Dale

Half Size Clock Oscillator Enable/Disable



ORDERING INFORMATION										
XO-52	В	R	E	40M	e2					
MODEL	FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm)	OTR blank = 0 °C to + 70 °C R = - 40 °C to + 85 °C	ENABLE/DISABLE blank = pin 1 open E = disable to tri-state	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE standard					

GLOBAL PART NUMBER								
X O 5 2 MODEL	C FREQUENCY STABILITY	T OTR	ENABLE/ DISABLE	PACKAGE CODE	N A OPTIONS	FREQUENCY		



PART MARKING

Line 1: M2802XXXXX (part number)
Line 2: XX.XXXXM (frequency)
Line 3: yywwvv (date/factory code)

www.vishay.com For technical questions, contact: frequency@vishay.com

Document Number: 35025 Revision: 24-Nov-10





Vishay

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.

Revision: 18-Jul-08

Document Number: 91000 www.vishay.com