

## Half Size Clock Oscillators Enable/Disable



The XO-523 series oscillator is half size, has Tri-state enable/disable controlled function, and is with a 3.3 V power supply voltage. The metal package with pin#4 case ground acts as shielding to minimize EMI radiation.

### FEATURES

- Tri-state enable/disable
- 8 pin half size
- Industry standard
- Wide frequency range
- Low cost
- Resistance weld package
- 3.3 V
- Lead (Pb)-free terminations and RoHS compliant

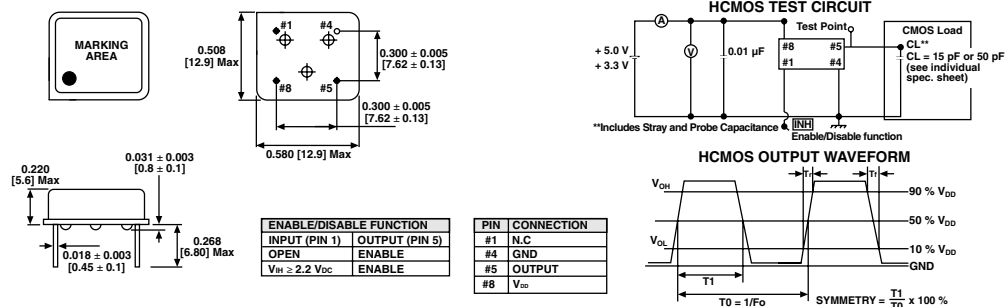


### STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	XO-523
Frequency Range	F <sub>O</sub>		1 MHz ~ 100.00 MHz
Frequency Stability*		All Condition*	± 25 ppm, ± 50 ppm, ± 100 ppm
Operating Temperature Range	T <sub>OPR</sub>		0 °C ~ 70 °C (- 40 °C ~ + 85 °C option)
Storage Temperature Range	T <sub>STG</sub>		- 55 °C ~ + 125 °C
Power Supply Voltage	V <sub>DD</sub>		3.3 V ± 10 %
Aging (First Year)		25 °C ± 3 °C	± 5 ppm
Supply Current	I <sub>DD</sub>	1 MHz to 23.999 MHz	15 mA Max
		24.000 MHz to 49.999 MHz	20 mA Max
		50.000 MHz to 69.999 MHz	30 mA Max
		70.000 MHz to 100.000 MHz	45 mA Max
Output Symmetry	Sym	At 1/2 V <sub>DD</sub>	40/60 % (45/55 % Option)
Rise Time	T <sub>r</sub>	20 % V <sub>DD</sub> ~ 80 % V <sub>DD</sub>	8 ns Max
Fall Time	T <sub>f</sub>	80 % V <sub>DD</sub> ~ 20 % V <sub>DD</sub>	8 ns Max
Output Voltage	V <sub>OH</sub>		90 % V <sub>DD</sub> Min
	V <sub>OL</sub>		10 % V <sub>DD</sub> Max
Output Load	TTL Load		1 ~ 5 TTL
	HCMOS Load		~ 50 M : 30 pF ~ 125 M : 15 pF
Start-up Time		T <sub>s</sub>	10 ms Max
Pin 1, tri-state function			Pin 1 = H or open... Output active at pin 5 Pin 1 = L... high impedance at pin 5

\* Include: 25 °C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration.

### DIMENSIONS in inches [millimeters]



ENABLE/DISABLE FUNCTION		PIN CONNECTION	
INPUT (PIN 1)	OUTPUT (PIN 5)	#1	N.C
OPEN	ENABLE	#4	GND
V <sub>IH</sub> ≥ 2.2 V <sub>OC</sub>	ENABLE	#5	OUTPUT
		#8	V <sub>DD</sub>

### ORDERING INFORMATION

XO-523 MODEL	B FREQUENCY STABILITY	R OTR	E ENABLE/DISABLE	40 M FREQUENCY/MHz	e2 JEDEC LEAD (Pb)-FREE STANDARD
	AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm)	Blank = 0 °C to + 70 °C R = - 40 °C to + 85 °C	Blank = Pin 1 open E = Disable to Tristate		

### GLOBAL PART NUMBER

X	O	3	2	C	T	E	L	N	A	4	0	M
MODEL				FREQUENCY STABILITY		OTR	ENABLE/DISABLE CODE	OPTIONS		FREQUENCY		



## GLOBAL PART NUMBERING

MODEL NUMBER	FREQUENCY STABILITY	OPERATING TEMPERATURE (OTR)	ENABLE/DISABLE	PACKAGE CODE	OPTIONS	FREQUENCY
XO53 = XO-53 XO54 = XO-54 XO34 = XO-543 XO52 = XO-52 XO32 = XO-523 XO56 = XO-56 XOVC = XOVC-23 XO5M = XOSM-52 XO63 = XOSM-533 XO62 = XOSM-532 XO61 = XOSM-531 XO57 = XOSM-57 XO37 = XOSM-573 XO27 = XOSM-572 XO17 = XOSM-571 XO55 = XOSM-55 XO35 = XOSM-553	C = 0.01 % (100 ppm) D = 0.005 % (50 ppm) E = 0.0025 % (25 ppm)	T = 0 °C to +70 °C R = -40 °C to +85 °C	F = Pin 1 Open E = Disable to Tristate	TAPE AND REEL H = RF7  BULK A = B04 (XO63, XO62, XO61) C = D06 (XO57, XO37, XO27, XO17) D = D07 (XO53, XO54, XO34, XO56, XOVC, XO55, XO35) L = D08 (XO52, XO32, XO5M)	NA = No Additional Options 60 = 45/55 Symmetry  Contact factory for all other options	4M = 4 MHz 40M = 40 MHz 100M = 100 MHz 12M288 = 12.288 MHz  M is used as decimal place holder in frequency

Example: XO52CTELNA40M



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