

XO-52

Vishay Dale



Half Size Clock Oscillators 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

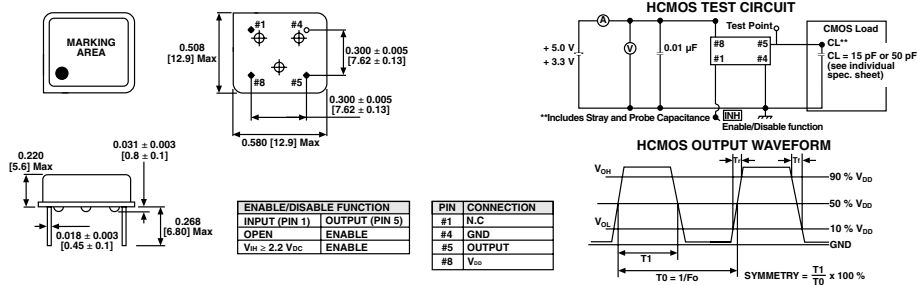
- Tri-state enable/disable
- 8 pin half size
- Industry standard
- Wide frequency range
- Low cost
- Resistance weld package
- 5 V
- Lead (Pb)-free terminations and RoHS compliant



STANDARD ELECTRICAL SPECIFICATIONS			
PARAMETER	SYMBOL	CONDITION	XO-52
Frequency Range	F_O		1 MHz ~ 100.00 MHz
Frequency Stability*		All Condition*	± 25 ppm, ± 50 ppm, ± 100 ppm
Operating Temperature Range	T_{OPR}		$0^\circ\text{C} \sim 70^\circ\text{C}$ ($-40^\circ\text{C} \sim +85^\circ\text{C}$ option)
Storage Temperature Range	T_{STG}		$-55^\circ\text{C} \sim +125^\circ\text{C}$
Power Supply Voltage	V_{DD}		$5.0\text{ V} \pm 10\%$
Aging (First Year)		$25^\circ\text{C} \pm 3^\circ\text{C}$	± 5 ppm
Supply Current	I_{DD}	1 MHz to 23.999 MHz	20 mA Max
		24.000 MHz to 49.999 MHz	30 mA Max
		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	$20\% V_{DD} \sim 80\% V_{DD}$	10 ns Max
Fall Time	T_f	$80\% V_{DD} \sim 20\% V_{DD}$	10 ns Max
Output Voltage	V_{OH}		$90\% V_{DD}$ Min
	V_{OL}		$10\% V_{DD}$ Max
Output Load	TTL Load		1 ~ 10 TTL
	HCMOS Load		$\sim 50\text{ M} : 50\text{ pF}$
			$\sim 70\text{ M} : 30\text{ pF}$
Start-up Time		T_s	$\sim 100\text{ M} : 15\text{ pF}$ 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]



ORDERING INFORMATION					
XO-52 MODEL	B FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) Standard	R OTR Blank = 0°C to $+70^\circ\text{C}$ R = -40°C to $+85^\circ\text{C}$	E ENABLE/DISABLE Blank = Pin 1 open E = Disable to Tristate	40 M FREQUENCY/MHZ	e2 JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER												
X	O	5	2	C	T	E	L	N	A	4	0	M
MODEL				FREQUENCY STABILITY		OTR	ENABLE/DISABLE	PACKAGE CODE	OPTIONS		FREQUENCY	



GLOBAL PART NUMBERING						
MODEL NUMBER	FREQUENCY STABILITY	OPERATING TEMPERATURE (OTR)	ENABLE/DISABLE	PACKAGE CODE	OPTIONS	FREQUENCY
X O 5 2 XO53 = XO-53 XO54 = XO-54 XO34 = XO-543 XO52 = XO-52 XO53 = 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 C = 0.01 % (100 ppm) D = 0.005 % (50 ppm) E = 0.0025 % (25 ppm)	T T = 0 °C to +70 °C R = -40 °C to +85 °C	E F = Pin 1 Open E = Disable to Tristate	L 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)	N A NA = No Additional Options 60 = 45/55 Symmetry Contact factory for all other options	4 0 M 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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