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

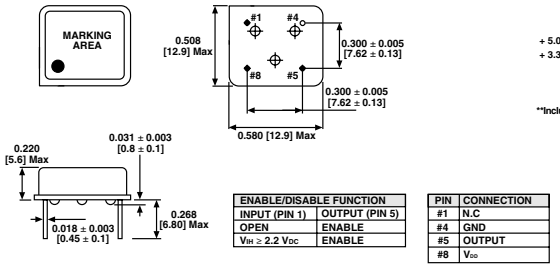
RoHS COMPLIANT

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 °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 ± 10 %
Aging (First Year)		25 °C ± 3 °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} ~ 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	TTL Load		1 ~ 10 TTL
	HCMOS Load		~ 50 M : 50 pF
			~ 70 M : 30 pF
			~ 100 M : 15 pF
Start-up Time		Ts	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

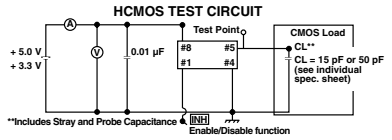
* Include: 25 °C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration.

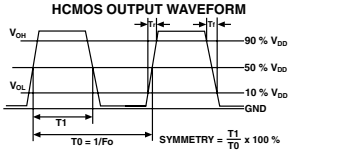
DIMENSIONS in inches [millimeters]



ENABLE/DISABLE FUNCTION	
INPUT (PIN 1)	OUTPUT (PIN 5)
OPEN	ENABLE
$V_{IH} \geq 2.2$ Vdc	ENABLE

PIN	CONNECTION
#1	N.C
#4	GND
#5	OUTPUT
#8	V_{DD}





ORDERING INFORMATION

XO-52	B	R	E	40 M	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 Tristate	FREQUENCY/MHz	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

X O 5 2	C	T	E	L	N A	4 0 M
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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