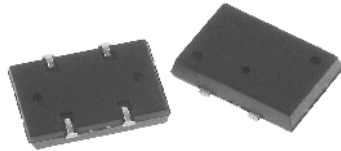


J - Lead Plastic Clock Oscillators



The XOSM-55 series oscillator is a J-Lead plastic tri-state enable/disable controlled clock oscillator with a 5.0 V power supply voltage. The J-Lead configuration and high resistance soldering temperature make it ideal for surface mount production.

FEATURES

- J-Lead plastic surface mount
- SG-615 compatible
- Wide frequency range
- Low cost
- Tri-state enable/disable
- 5.0 V power supply
- Lead (Pb)-free terminations and RoHS compliant

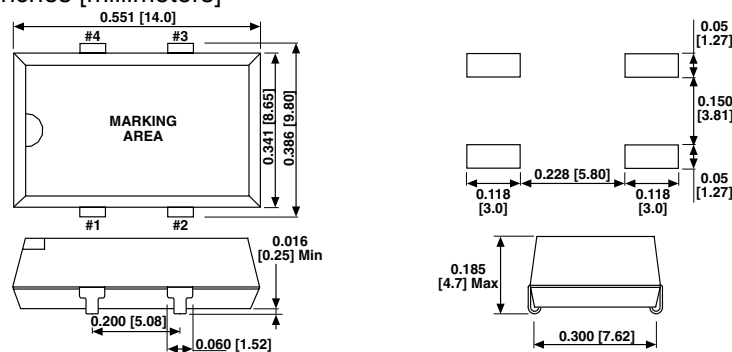


STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	XOSM-55
Frequency Range	F_O		1 MHz ~ 66.667 MHz
Frequency Stability*			± 50 ppm, ± 100 ppm
Operating Temperature	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 $\pm 10\%$
Aging (First Year)		25 °C ± 3 °C	± 5 ppm
Supply Current	I_{DD}	1.000 MHz to 23.999 MHz	20 mA Max
		24.000 MHz to 49.999 MHz	30 mA Max
		50.000 MHz to 66.667 MHz	40 mA Max
Output Symmetry	Sym	At 0.5 V_{DD}	40/60 % (45/55 % Option)
Rise Time	T_r	10 % V_{DD} ~ 90 % V_{DD}	8 ns Max
Fall Time	T_f	90 % V_{DD} ~ 10 % V_{DD}	7 ns Max
Output Voltage	V_{OH}		90 % V_{DD} Min
	V_{OL}		10 % V_{DD} Max
Output Load	TTL Load		1 ~ 10 LSTTL
	HCMOS Load		30 pF Max
Start-up Time		T_s	10 ms Max
Pin 1, tri-state function			Pin 1 = H or open.... output active at pin 3 Pin 1 = L..... high impedance at pin 3

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

DIMENSIONS in inches [millimeters]



PIN	CONNECTION
#1	TRI-STATE/NC
#2	GND
#3	OUTPUT
#4	V_{DD}

ENABLE/DISABLE FUNCTION	
INPUT (PIN1)	OUTPUT (PIN3)
OPEN	ENABLE
$V_{IH} \geq 2.2V_{oc}$	ENABLE
$V_{IL} \leq 0.8V_{oc}$	DISABLE

***note: A 0.01 μ F bypass capacitor should be placed between V_{DD} (Pin4) and GND (Pin2) to minimize power supply line noise

ORDERING INFORMATION

XOSM-55	B	R	E	50 M	e2
MODEL	FREQUENCY STABILITY	OTR	ENABLE/DISABLE	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE STANDARD
	A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) Standard	Blank = Standard R = -40 °C to +85 °C	E = Disable to Tristate		

GLOBAL PART NUMBER

X	O	5	5	C	T	E	D	N	A	5	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
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 = 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



Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.