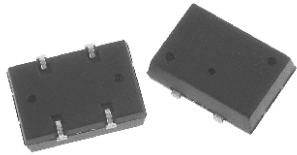


## Surface Mount Oscillator



The XOSM-553 series oscillator is a J-Lead plastic tri-state enable/disable controlled clock oscillator with a 3.3 V power supply voltage. The J-Lead configuration and high resistance soldering temperature make it ideal for surface mount production.

### FEATURES

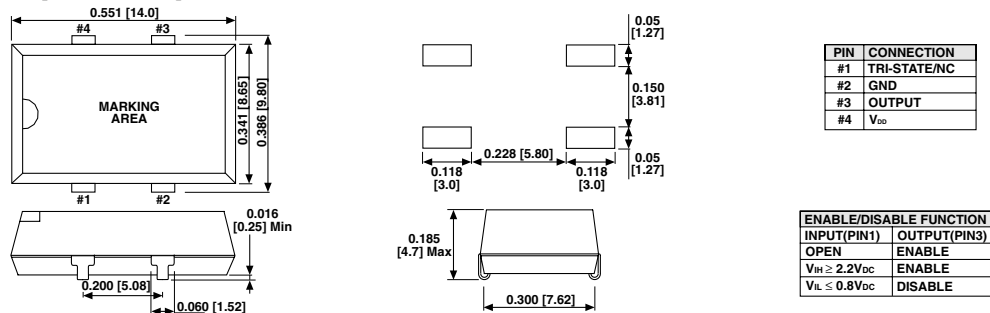
- J-Lead plastic surface mount
- SG-615 compatible
- Wide frequency range
- Low cost
- Tri-state enable/disable
- 3.3 V power supply
- Lead (Pb)-free terminations and RoHS compliant



STANDARD ELECTRICAL SPECIFICATIONS			
PARAMETER	SYMBOL	CONDITION	XOSM-553
Frequency Range	$F_O$		1 MHz ~ 66.667 MHz
Frequency Stability*			$\pm 50$ ppm, $\pm 100$ 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	$V_{DD}$		3.3 V $\pm 10$ %
Aging (First Year)		25 °C $\pm 3$ °C	$\pm 5$ ppm
Supply Current	$I_{DD}$	1.000 MHz to 23.999 MHz	15 mA Max
		24.000 MHz to 49.999 MHz	20 mA Max
		50.000 MHz to 66.667 MHz	30 mA Max
Output Symmetry	Sym	At 1/2 $V_{DD}$	40/60 % (45/55 % Option)
Rise Time	$T_r$	10 % $V_{DD}$ ~ 90 % $V_{DD}$	5 ns Max
Fall Time	$T_f$	90 % $V_{DD}$ ~ 10 % $V_{DD}$	5 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		15 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]



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

ORDERING INFORMATION					
XOSM-53 MODEL	B FREQUENCY STABILITY A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) Standard	R OTR Blank = Standard R = - 40 °C to + 85 °C	E ENABLE/DISABLE E = Disable to Tristate	50 M FREQUENCY/MHz	e2 JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER												
X	O	3	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
X O 5 2 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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