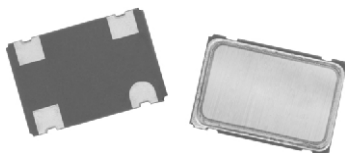


Surface Mount Oscillator



The XOSM-573 series is an ultra miniature package clock oscillator with dimensions 7.0 mm x 5.0 mm x 1.9 mm. It is mainly used in portable PC and telecommunication devices and equipment

FEATURES

- Size: 7.0 x 5.0 x 1.9 (mm)
- Miniature package
- Tri-state enable/disable
- TTL/HCMOS compatible
- Tape and reel
- I_R re-flow
- 3.3 V input voltage
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

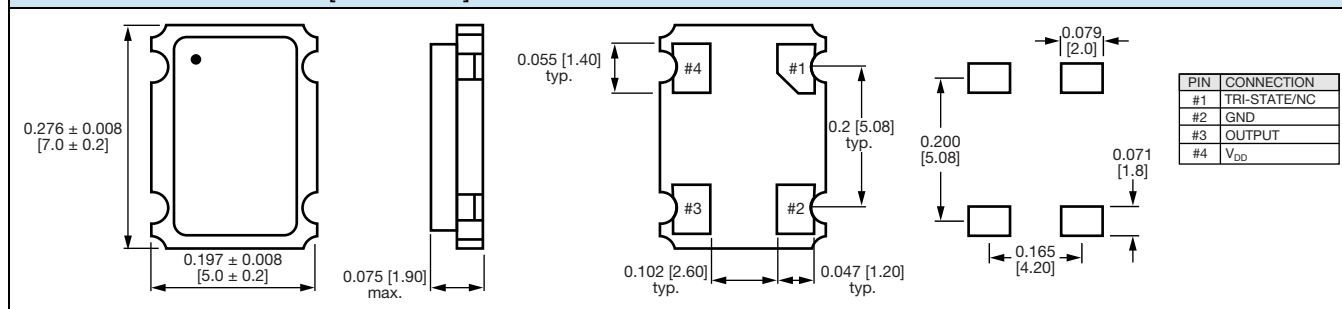


RoHS
COMPLIANT
HALOGEN
FREE

STANDARD ELECTRICAL SPECIFICATIONS			
PARAMETER	SYMBOL	CONDITION	VALUE
Frequency range	F_O	-	1.500 MHz to 100.000 MHz
Frequency stability ⁽¹⁾		all conditions	± 25 ppm, ± 50 ppm, ± 100 ppm
Operating temperature range	T_{OPR}	-	0 °C to 70 °C
			- 40 °C to + 85 °C (option)
Storage temperature range	T_{STG}	-	- 55 °C to + 125 °C
Power supply voltage	V_{DD}	-	3.3 V \pm 10 %
Aging (first year)		25 °C \pm 3 °C	± 5 ppm
Supply current	I_{DD}	1.500 MHz to 20.000 MHz	10 mA max.
		20.001 MHz to 50.000 MHz	20 mA max.
		50.001 MHz to 67.000 MHz	30 mA max.
		67.001 MHz to 100.000 MHz	55 mA max.
Output symmetry	Sym	at $\frac{1}{2} V_{DD}$	40 %/60 % (45 %/55 % option)
Rise/fall time	t_r/t_f	1.500 MHz to 50.000 MHz	6 ns
		50.001 MHz to 80.000 MHz	4 ns
		80.001 MHz to 100.000 MHz	2 ns
Output voltage	V_{OH}	-	90 % V_{DD} min.
	V_{OL}	-	10 % V_{DD} max.
Output load		-	2 TTL or 15 pF
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)

Note

⁽¹⁾ Include: 25 °C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

DIMENSIONS in inches [millimeters]											
											
<table border="1"> <thead> <tr> <th>PIN</th><th>CONNECTION</th></tr> </thead> <tbody> <tr> <td>#1</td><td>TRI-STATE/NC</td></tr> <tr> <td>#2</td><td>GND</td></tr> <tr> <td>#3</td><td>OUTPUT</td></tr> <tr> <td>#4</td><td>V_{DD}</td></tr> </tbody> </table>		PIN	CONNECTION	#1	TRI-STATE/NC	#2	GND	#3	OUTPUT	#4	V_{DD}
PIN	CONNECTION										
#1	TRI-STATE/NC										
#2	GND										
#3	OUTPUT										
#4	V_{DD}										

Note

- A 0.01 μ F bypass capacitor should be placed between V_{DD} (pin 4) and GND (pin 2) to minimize power supply line noise

ORDERING INFORMATION

XOSM-573	B	R	E	50M	e4
MODEL	FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) standard	OTR blank = standard R = - 40 °C to + 85 °C	ENABLE/DISABLE E = disable to tri-state	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE standard

GLOBAL PART NUMBER

X	O	3	7	C	T	E	C	N	A	5	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	OPTION		FREQUENCY		
XO53 = XO-53 XO54 = XO-54 XO34 = XO-543 XO52 = XO-52 XO32 = XO-523 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, 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

PART MARKING

Line 1:	M2809XXXXX (part number)
Line 2:	XX.XXXXM (frequency)
Line 3:	yywwvv (date/factory code)



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