

**XO, XI low profile crystal
(3.50 ~ 90)MHz**

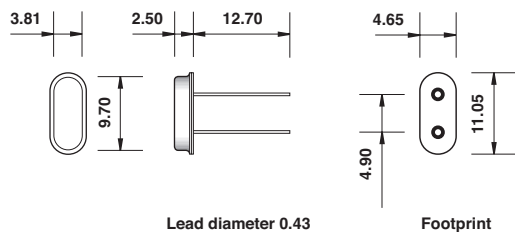
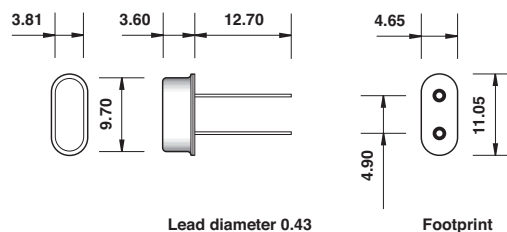
- low profile resistance weld packages
- standard and custom frequencies
- AT cut
- low cost

Electrical specification

case style	XO: height 2.50mm, XI: height 3.51mm
frequency range	(3.50 ~ 90.0)MHz, fundamental to 32.0MHz
adjustment tolerance	from ± 5 ppm at +25°C, frequency dependent
temperature tolerance	from ± 5 ppm, frequency and temperature range dependent
operating temperature	(-10 +60)°C ~ (-40 +85)°C
storage temperature	(-40 +85)°C
load	customer specified
shunt capacitance C_0	7.0pF max.
drive level	10 μ W ~ 5milli.W
Q factor	80,000 typical
ageing	± 5 ppm first year max.
insulation resistance	500Meg. ohm min. at+100Vd.c.

Ordering information

EXAMPLE	XO crystal, 10.00MHz, load 20pF, ± 20 ppm at +25°C, ± 50 ppm(-10 +60)°C
TFC PART NUMBER	XO 10.00M H C G I
XO	crystal series: XO height = 2.50mm, XI height = 3.51mm
10.00M	frequency: 10.00M = 10.00MHz, frequency range from (3.50 ~ 90)MHz
H	load capacitance: H = 20pF
C	adjustment tolerance at +25°C: C = ± 20 ppm
G	temperature tolerance: G = ± 50 ppm
I	temperature range: I = (-10 +60)°C
OPTIONS	
case height	XO: 2.50mm, XI: 3.51mm
load capacitance	C: 10pF, D: 12pF, E: 15pF, G: 18pF, H: 20pF, I: 30pF, J: 32pF, S: series
adjustment tolerance	A: ± 5 ppm, B: ± 10 ppm, C: ± 20 ppm, E: ± 30 ppm, G: ± 50 ppm, H: ± 100 ppm, P: ± 15 ppm
temperature tolerance	A: ± 5 ppm, B: ± 10 ppm, C: ± 20 ppm, E: ± 30 ppm, G: ± 50 ppm, H: ± 100 ppm, P: ± 15 ppm
temperature range	B: (0 +55)°C, I: (-10 +60)°C, C: (-20 +70)°C, L: (-40 +85)°C

XO, XI low profile crystal
XO dimensions(mm)

XI dimensions(mm)

ESR - equivalent series resistance

frequency range(MHz)	cut/mode	esr(Ω)
<4.0	AT1	<140
(4.0 ~ 5.0)	AT1	<120
(5.0 ~ 7.0)	AT1	<80
(7.0 ~ 9.0)	AT1	<45
(9.0 ~ 13.0)	AT1	<40
(13.0 ~ 16.0)	AT1	<35
(16.0 ~ 20.0)	AT1	<30
(20.0 ~ 30.0)	AT1	<25
(30.0 ~ 36.0)	AT1	<25
(30.0 ~ 36.0)	AT3	<80
(36.0 ~ 80.0)	AT3	<80