

XS sub miniature smd crystal (10 ~ 50)MHz fundamental

- (5.0 x 3.2)mm, height 1.4mm
- ceramic package, glass seal
- 12mm tape and reel
- 1000/ 3000 pieces per reel
- RoHS compliant

Electrical specification

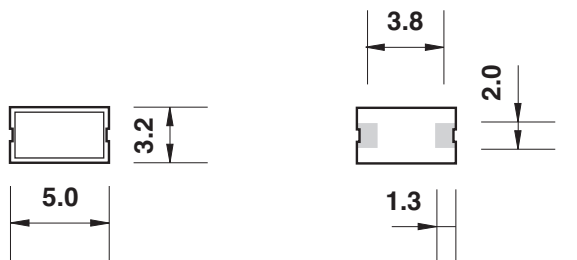
case style	XS: (5.0 x 3.2)mm, height 1.4mm
frequency range	(10.0 ~ 50.0)MHz
standard frequencies	16.00MHz, 19.50MHz, 20.00MHz, 24.00MHz, 26.00MHz
adjustment tolerance	from ± 5 ppm at +25°C, frequency dependent
temperature tolerance	from ± 5 ppm, frequency and temperature range dependent
operating temperature	(-10 +60)°C ~ (-40 +85)°C
storage temperature	(-55 +125)°C
load	customer specified
shunt capacitance C_0	7.0pF max.
drive level	10 μ W ~ 100 μ W
Q factor	80,000 typical
ageing	± 5 ppm first year max.
insulation resistance	500Meg. ohm min. at +100Vd.c.

Ordering information

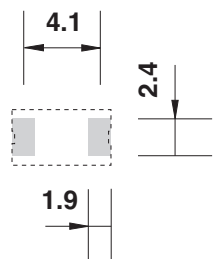
EXAMPLE	XS crystal, 16.00MHz, load 20pF, ± 10ppm at +25°C, ± 10ppm(-10 +60)°C
TFC PART NUMBER	XS 16.00M H B B I
XS	crystal series: XS
16.00M	frequency: 16.00M = 16.00MHz, frequency range from (9.60 ~ 125)MHz
H	load capacitance: H = 20pF
B	adjustment tolerance at +25°C: C = ± 10 ppm
B	temperature tolerance: B = ± 10 ppm
I	temperature range: I = (-10 +60)°C
OPTIONS	
load capacitance	A: 8pF, B: 9pF, C: 10pF, D: 12pF, E: 15pF, F: 16pF, G: 18pF, H: 20pF, J: 32pF, S: series
adjustment tolerance	A: ± 5 ppm, B: ± 10 ppm, P: ± 15 ppm, C: ± 20 ppm, E: ± 30 ppm, G: ± 50 ppm
temperature tolerance	A: ± 5 ppm, B: ± 10 ppm, P: ± 15 ppm, C: ± 20 ppm, E: ± 30 ppm, G: ± 50 ppm, H: ± 100 ppm
temperature range	B: (0 +55)°C, I: (-10 +60)°C, C: (-20 +70)°C, L: (-40 +85)°C

XS sub miniature crystal

XS dimensions(mm)



**Pads viewed from bottom
pad size 2.0 x 1.30**



Suggested land pattern

**pads are gold 2.5 μ min.
over nickel,
suitable for vapour phase
or reflow soldering**

ESR - equivalent series resistance

frequency range(MHz)	cut/mode	esr(Ω)
10.0 ~ 16.0	AT1	<150
16.0 ~ 20.0	AT1	<100
20.0 ~ 30.0	AT1	<70
30.0 ~ 50.0	AT1	<50