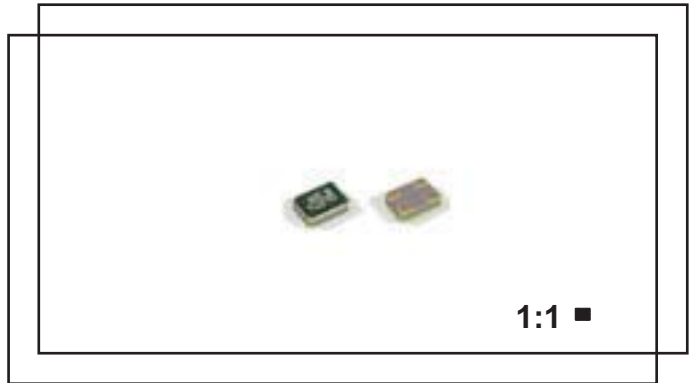


CX-06 micro smd crystal (18.0 ~ 80.0)MHz fundamental

- # (2.0 x 1.6)mm ceramic package
- # high reliability
- # 8.0mm tape and reel
- # AT cut fundamental
- # RoHS compliant



Electrical specification

Case style	CX06: height 0.5mm
Frequency range	(18.0 ~ 80.0)MHz, fundamental
Standard frequencies	20.00MHz, 24.00MHz, 25.00MHz, 26.00MHz, 38.839364MHz, 40.00MHz,
Adjustment tolerance	from ± 15 ppm at $+25^{\circ}\text{C}$, frequency dependent
Temperature tolerance	from ± 10 ppm, frequency and temperature range dependent
Operating temperature	$(0 +50)^{\circ}\text{C} \sim (-40 +85)^{\circ}\text{C}$
Storage temperature	$(-40 +85)^{\circ}\text{C}$
Load	8pF, 10pF typical
Shunt capacitance C_0	5.0pF max.
Drive level	100 μW max.
Q factor	80,000 typical
Ageing	± 5 ppm max. per year
Insulation resistance	500Meg. ohm min. at 100Vd.c.

Ordering information

The CX-06 smd crystals may be specified within their available frequency range together with load capacitance, adjustment tolerance, temperature tolerance and temperature range with each parameter coded as follows

Example CX-06 crystal, 20.00MHz, load 8pF, ± 20 ppm at $+25^{\circ}\text{C}$, ± 10 ppm $(-10 +60)^{\circ}\text{C}$

TFC PART NUMBER CX06X 20.00M A C B I

'CX06X' crystal series: CX06X = CX-06

'20.00M' frequency: 20.00M = 20.00MHz, frequency range from (18.0 ~ 80.0)MHz fundamental

'C' load capacitance: A = 8pF

'C' adjustment tolerance at $+25^{\circ}\text{C}$: C = ± 20 ppm

'B' temperature tolerance: B = ± 10 ppm

'I' temperature range: I = $(-10 +60)^{\circ}\text{C}$

Load capacitance A: 8pF, or 5pF available

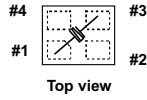
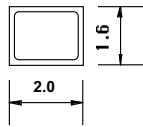
Adjustment tolerance C: ± 20 ppm, E: ± 30 ppm, G: ± 50 ppm, H: ± 100 ppm, P: ± 15 ppm, B: ± 10 ppm

Temperature tolerance B: ± 10 ppm, C: ± 20 ppm, E: ± 30 ppm, G: ± 50 ppm, H: ± 100 ppm, P: ± 15 ppm

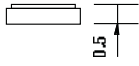
Temperature range B: $(0 +50)^{\circ}\text{C}$, I: $(-10 +60)^{\circ}\text{C}$, C: $(-20 +70)^{\circ}\text{C}$, L: $(-40 +85)^{\circ}\text{C}$

CX-06 micro smd crystal

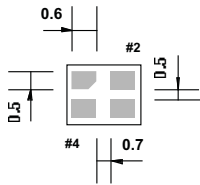
CX-06 dimensions(mm) shown x5 full size



Suggested land pattern

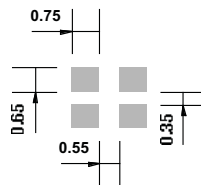


Pad size (0.6 x 0.5)mm



Bottom view

Pads #2 and #4
connected to metal top



Life size 1:1

ESR - equivalent series resistance

frequency range(MHz)	cut/mode	esr(Ω)
(18.0 ~ 20.0)	AT1	<300
(20.0 ~ 25.0)	AT1	<200
(25.0 ~ 40.0)	AT1	<100
(40.0 ~ 80.0)	AT1	<60