

X42

[4.0 * 2.5 * 0.7 mm]

Surface Mount Crystals**Fund.**

Min.

12MHz

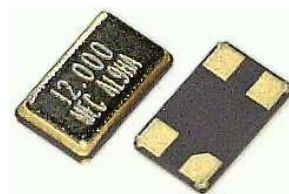
Max.

60MHz

RoHS Compliance

Features**Specifications**

- Exhibits extremely low aging and a high shock and vibration resistance .
- The entire package can be grounded via the top metal lid and two bottom pads .
- This low 0.6mm package height is ideal for height constrained applications.

**General Specifications**

Item / Type	X42 series (4.0 * 2.5 * 0.6 mm)
Frequency Range	12.000 ~ 60.000 MHz , AT-cut , Fundamental Mode (see Table 1)
Crystal Cut	Fundamental Mode , AT-Cut
Load Capacitance	Series or Parallel (8 to 32 pF) resonance
Drive Level	10 μ W typical (100 μ W max.)
Frequency Tolerance	± 5 ppm , ± 10 ppm , ± 20 ppm or ± 30 ppm at 25 $^{\circ}$ C
Frequency Stability	See Table 2
Aging	$\Delta F / F : \pm 3$ ppm / year (max.)
Storage Temperature Range	- 50 $^{\circ}$ C to 105 $^{\circ}$ C

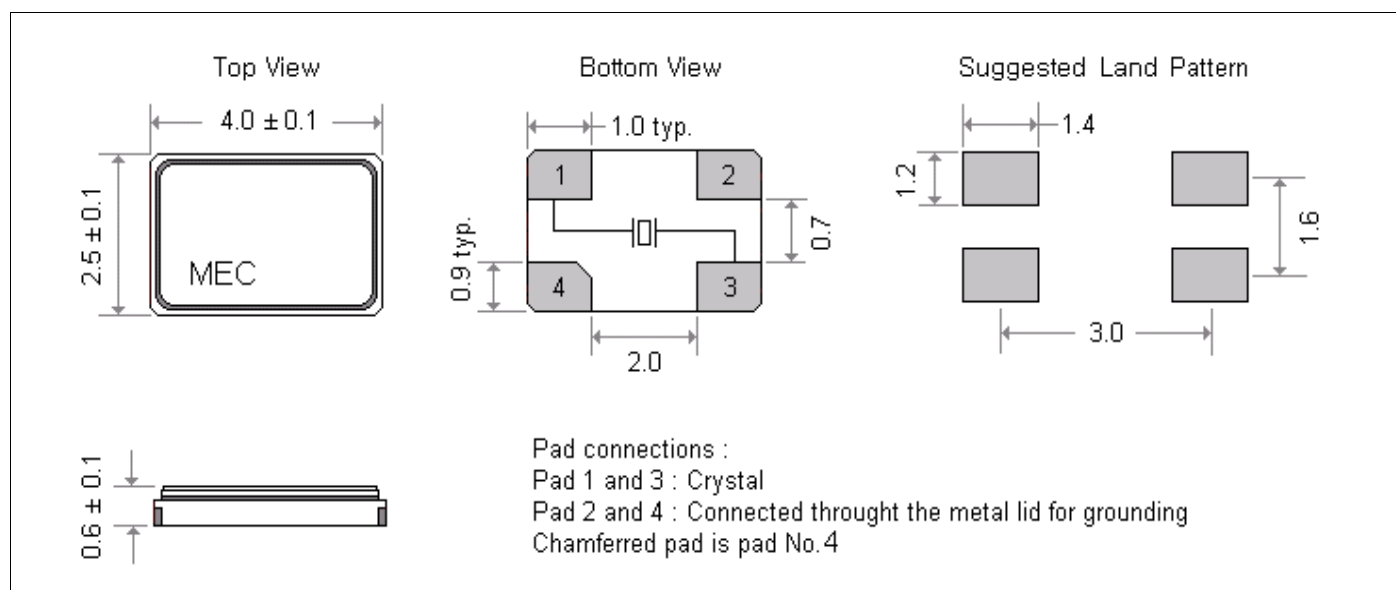
Table 1

ESR (Equivalent Series Resistance)	
Frequency Range	E. S. R.
12.000 ~ 16.000 MHz	80 Ω max
16.100 ~ 60.000 MHz	50 Ω max

Table 2

Frequency stability vs Operating temperature range							
Stability code	Temp. ($^{\circ}$ C) \ ppm	± 5	± 10	± 15	± 20	± 25	± 30
X	-10 to 60 $^{\circ}$ C	○	○	○	○	○	○
Y	-20 to 70 $^{\circ}$ C	▲	○	○	○	○	○
I	-40 to 85 $^{\circ}$ C			○	○	○	○

○ : available ; ▲ : contact Mercury

Outline Dimensions (Unit : mm)**Mercury** www.mercury-crystal.com