

■ Features

- RoHS compliant and lead-free product
- The whole package is grounded via the top metal lid and the two bottom pads .
- Small footprint. Ideal for space constrained products
- Extremely low aging. High shock and vibration resistance



RoHS Compliance

General Specifications

Item / Type	X22 series (2.5 * 2.0 * 0.6 mm)
Frequency Range	16.000 ~ 60.000 MHz
Crystal Cut	Fundamental Mode , AT-Cut
Load Capacitance	Series Resonance or Parallel (8 to 32 pF typical)
Drive Level	10μ W (100μ W max.)
Frequency Tolerance	± 5 ppm , ± 10 ppm , ± 20 ppm or ± 30 ppm at 25°C
Frequency Stability	See Table 2
Aging	ΔF / F : ±3 ppm / year (max.)
Storage Temperature Range	- 50°C to 105°C

Table 1

Series Resistance (max.)

Frequency / Type	X22
16.000 ~ 21.000 MHz	120 Ω max.
21.100 ~ 26.000 MHz	80 Ω max
26.100 ~ 60.000 MHz	60 Ω max

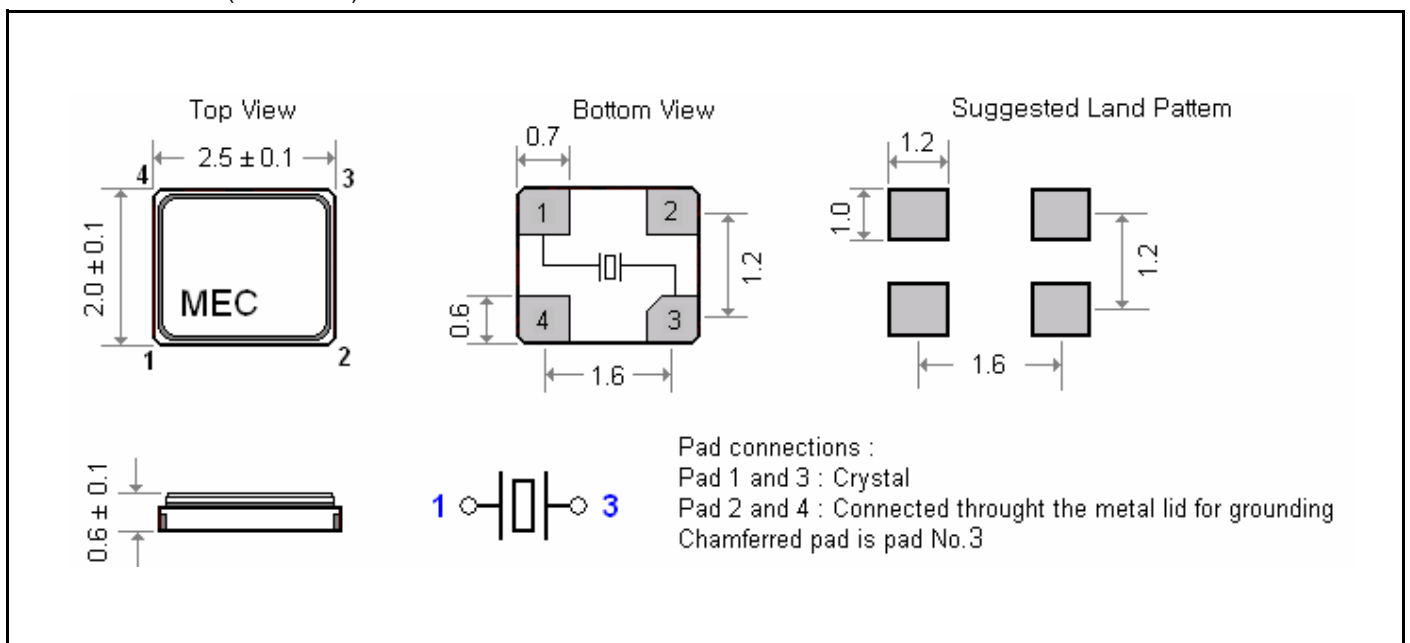
Table 2

Frequency stability Vs Operating temperature range

Temp. (°C) \ ppm		± 5	± 10	± 15	± 20	± 25	± 30
X	-10 to 60°C	○	○	○	○	○	○
Y	-20 to 70°C	▲	○	○	○	○	○
I	-40 to 85°C			○	○	○	○

○ : available ; ▲ : contact Mercury

Outline Dimensions (Unit : mm)



Pad connections :
 Pad 1 and 3 : Crystal
 Pad 2 and 4 : Connected through the metal lid for grounding
 Chamfered pad is pad No.3