Quartz Crystal [Surface Mount Crystals] *X22 series*

SMD type
2.5 x 2.0 x 0.6 mm



RoHS Compliance

Applications

- The entire package can be grounded via the top metal lid and the two bottom pads .
- Small footprint. Ideal for space constrained applications
- Exhibits extremely low aging with a high shock & vibration resistance.

General Specifications

Paramenters	Electrical Spec.
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 or Parallel (8 to 32 pF) resonance
Drive Level	10μ W typical (100μ W max.)
Frequency Tolerance	± 5 ppm , ± 10 ppm , ± 20 ppm or ± 30 ppm at 25°C
Frequency Stability	See Table 2
Aging	△F / F : ±3 ppm / year (max.)
Storage Temperature Range	- 50°C to 105°C

Table 1

ESR (Equivalent Series Resistance)	
Frequency Range	E. S. R.
16.000 ~ 21.000 MHz	120 Ω max.
21.100 ~ 26.000 MHz	80 Ω max
26.100 ~ 60.000 MHz	60 Ω max

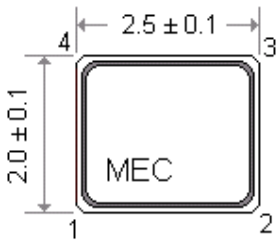
Table 2

Frequency stability Vs Operating temperature range							
Stability code	Temp. (ºC) \ ppm	± 5	± 10	± 15	± 20	± 25	± 30
X	-10 to 60°C	○	○	○	○	○	○
Y	-20 to 70°C	▲	○	○	○	○	○
I	-40 to 85°C			○	○	○	○

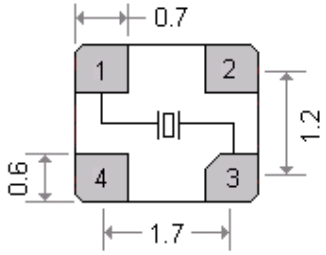
○ : available ; ▲ : contact Mercury

Outline Dimensions (Unit : mm)

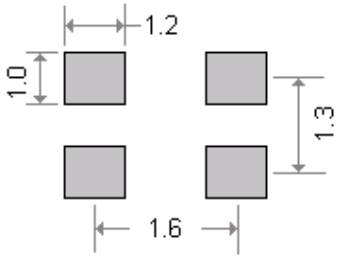
Top View

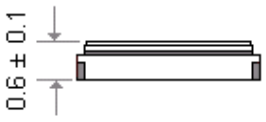


Bottom View



Suggested Land Pattern





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

Mercury www .mercury-crystal.com

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