Crystal Unit (FA1612AS)

This document is for Wingtech.

1. Specification

No.	Parameters	Requirements
1	Package type	1.6 x 1.2mm (TH+X'TAL)
2	Nominal frequency	38.400000 MHz
3	Mode of vibration	AT-cut / Fundamental
4	Storage temperature	-40 to +125 deg.C
5	Operating temperature	-30 to +85 deg.C
6	Load capacitance [CL]	8.0 pF
7	Frequency tolerance	+/-10.0 ppm at 25+/-3 deg.C
8	Frequency versus temperature characteristics	+/-12.0 ppm (-30 to +85 deg.C, Ref. 29 deg.C)
9	The average slope of f_tem [C1]	-0.4 to -0.1 ppm/deg.C (between 25 and 35 deg.C)
10	Second-order curve fitting coefficient [C2]	-4.5 to +4.5 x e ⁻⁴ ppm/deg.C^2 (-30 to +85 deg.C)
11	Third-order curve fitting coefficient [C3]	8.5 to 11.5x e ⁻⁵ ppm/deg.C^3 (-30 to +85 deg.C)
12	Level of drive	200 uW max.
13	Motional resistance [ESR]	50 ohm max.
14	Quality Factor [Q]	75,000 min
15	Spurious mode series resistance	1100 ohm min (at +/-1 MHz)
16	Motional capacitance [C1]	1.2 to 2.0 fF
17	Shunt capacitance [C0]	0.4 to 0.8 pF
18	Motion inductance [L1]	10.6 mH +/- 20%
19	Thermal hysteresis	+/- 0.5ppm
20	Frequency Discontinuitie	+/- 0.5ppm
21	Thermistor	Used thermistor is 100Kohm +/- 1% and B-constant 4250K +/- 1%
22	Frequency aging	+/-1.0 ppm / year at 25 deg.C, first year
23	Insulation resistance	500 M ohms min. / DC 100V +/- 15V

*The content of this document is subjects to change without notice.

2. Dimension and Marking (Example)





DRAW: M.Kanai CHK'D: G.Yamashita APP: S. Aoki
 Pin
 Connection

 1
 Xtal

 2
 GND,thermistor

 3
 Xtal

 4
 thermistor



Marking

Laser marking

Package

:KOVAR,
Electrolytic Ni plating
:Ceramic, W+Ni+Au plated
:Seam Weld

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AT Design Group TD PRODUCTS DEVELOPMENT DEPARTMENT

SEIKO EPSON CORPORATION