



MHz RANGE CRYSTAL UNIT

FA-118T



Product Number
FA-118T: X1E000251xxxx26



- Nominal frequency range : 24 MHz to 54 MHz
- External dimensions : 1.6 × 1.2 × 0.35 mm
- Overtone order : Fundamental
- Applications : Mobile phone, Bluetooth, W-LAN
ISM band radio, Clock for MPU

Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks
Nominal frequency range	f_nom	24 MHz to 54 MHz	Fundamental Please contact us about available frequencies.
Storage temperature range	T_stg	-40 °C to +125 °C	Storage as single product.
Operating temperature range	T_use	-40 °C to +105 °C (+125 °C)	Please contact us about +105 °C < T_use
Level of drive	DL	200 μW Max.	Recommended: 10 μW
Frequency tolerance (standard)	f_tol	±10 × 10 ⁻⁶	+25 °C, Please contact us for requirements not listed in this specification.
Frequency versus temperature characteristics. (standard)	f_tem	±12 × 10 ⁻⁶ / -20 °C to +75 °C	Please contact us for requirements not listed in this specification.
		±17 × 10 ⁻⁶ / -30 °C to +85 °C	
		±20 × 10 ⁻⁶ / -40 °C to +85 °C	
		±30 × 10 ⁻⁶ / -40 °C to +105 °C	
Load capacitance	CL	6 pF to ∞	Please specify.
Motional resistance (ESR)	R1	As per below Table1.	
Frequency aging	f_age	±1 × 10 ⁻⁶ / year Max. (24 MHz ≤ f_nom ≤ 40 MHz)	+25 °C, First year
		±2 × 10 ⁻⁶ / year Max. (40 MHz < f_nom ≤ 54 MHz)	

Table 1. Motional resistance(ESR) R1

Frequency	Motional resistance
24 MHz ≤ f_nom ≤ 32 MHz	200 Ω Max.
32 MHz < f_nom ≤ 36 MHz	100 Ω Max.
36 MHz < f_nom ≤ 40 MHz	80 Ω Max.
40 MHz < f_nom ≤ 54 MHz	60 Ω Max.

Product name

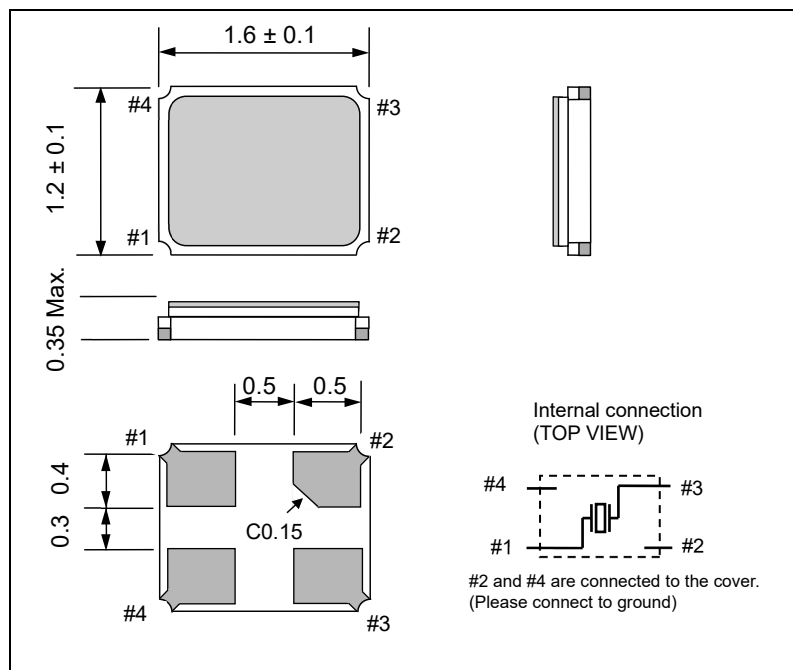
Product name FA-118T 24.000000MHz 12.0 +10.0-10.0
(Standard form) ① ② ③ ④

①Model ②Frequency ③Load capacitance(pF) ④Frequency tolerance(× 10⁻⁶, +25 °C)

In addition to the above mentioned specification item, please specify frequency temperature characteristics and operating temperature range in case of inquiry.

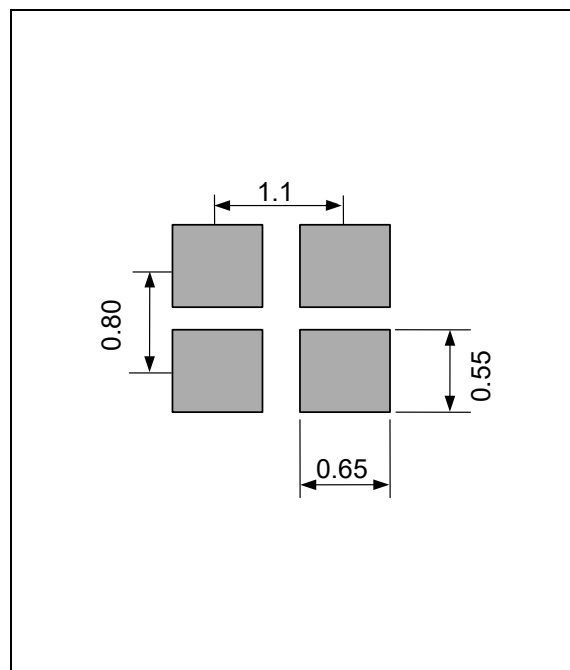
External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)



► Explanation of the mark that are using it for the catalog

	► Pb free.
	► Complies with EU RoHS directive. *About the products without the Pb-free mark. Contains Pb in products exempted by EU RoHS directive. (Contains Pb in sealing glass, high melting temperature type solder or other.)
	► Designed for automotive general equipment.
	► Designed for automotive applications related to driving and safety.

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