

## MHz RANGE CRYSTAL UNIT



Product Number (please contact us)  
**FA-118T : X1E000251xxxx00**

## FA-118T

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



## Specifications (characteristics)

Item	Symbol	Specifications		Conditions / Remarks
		For RF Reference	For Clock	
Nominal frequency range	f_nom	24.000 MHz to 54.000 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 +85 °C		
Level of drive	DL	100 $\mu$ W Max.	200 $\mu$ W Max.	Recommended: 1 $\mu$ W to 100 $\mu$ W
Frequency tolerance (standard)	f_tol	$\pm 10 \times 10^{-6}$ *1	$\pm 30 \times 10^{-6}$	+25 °C, Please contact us for requirements not listed in this specifications.
Frequency versus temperature characteristics (standard)	f_tem	$\pm 12 \times 10^{-6}$ *1	$\pm 30 \times 10^{-6}$	-20 °C to +75 °C, Please contact us for requirements not listed in this specifications.
Load capacitance	CL	6 pF to $\infty$		Please specify.
Motional resistance (ESR)	R1	As per table below		-20 °C to +75 °C
Frequency aging	f_age	$\pm 1 \times 10^{-6}$ / year Max.	$\pm 5 \times 10^{-6}$ / year Max.	+25 °C, First year

\*1 Please contact us for available frequency tolerances as they are dependent upon the nominal frequency.

## Motional resistance (ESR)

Frequency	Motional resistance
24.0 MHz $\leq$ f <sub>nom</sub> < 32.0 MHz	200 $\Omega$ Max.
32.0 MHz $\leq$ f <sub>nom</sub> < 36.0 MHz	100 $\Omega$ Max.
36.0 MHz $\leq$ f <sub>nom</sub> $\leq$ 54.0 MHz	80 $\Omega$ Max.

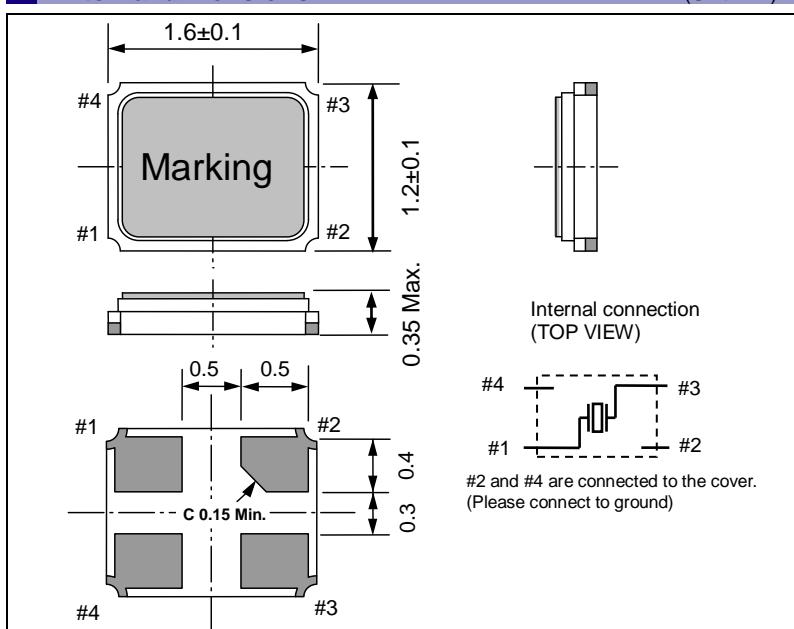
Product name FA-118T 24.000000MHz 12.0 +10.0-10.0  
(Standard form) ① ② ③ ④

①Model ②Frequency ③Load capacitance(pF) ④Frequency tolerance( $\times 10^{-6}$ , +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

Inquiry.  
(Unit:mm)



### Footprint (Recommended)

(Unit:mm)

