



MHz RANGE CRYSTAL UNIT

For Automotive



Product Number
X1E000381Axxx18

FA2016AA

- Nominal frequency range : 16 MHz to 54 MHz
- External dimensions : 2.0 × 1.6 × 0.5 mm
- Overtone order : Fundamental
- Applications : Car audio, Vehicle camera system,
Car navigation system, ECU clock,
Clock, Meter, Remote keyless entry

•Conforms to AEC-Q200



Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks
		For Automotive	
Nominal frequency range	f_nom	16.000 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 +125 °C	
Level of drive	DL	200 μW Max.	Recommended: 1 to 100 μW
Frequency tolerance	f_tol	$\pm 10 \times 10^{-6}$	+25 °C Please contact us for requirements not listed in this specifications.
Frequency versus temperature characteristics	f_tem	$\pm 20 \times 10^{-6}$ / -40 °C to +85 °C $\pm 50 \times 10^{-6}$ / -40 °C to +125 °C	Please contact us for requirements not listed in this specifications.
Load capacitance	CL	6 pF to ∞	Please specify.
Motional resistance (ESR)	R1	As per table below	-40 °C to +125 °C, DL=100 μW
Frequency aging	f_age	$\pm 3 \times 10^{-6}$ / year Max.	+25 °C, First year

Motional resistance (ESR)

Frequency	Motional resistance
16.0 MHz ≤ f_nom < 18.0 MHz	200 Ω Max.
18.0 MHz ≤ f_nom < 20.0 MHz	150 Ω Max.
20.0 MHz ≤ f_nom < 24.0 MHz	100 Ω Max.
24.0 MHz ≤ f_nom < 26.0 MHz	80 Ω Max.
26.0 MHz ≤ f_nom ≤ 54.0 MHz	60 Ω Max.

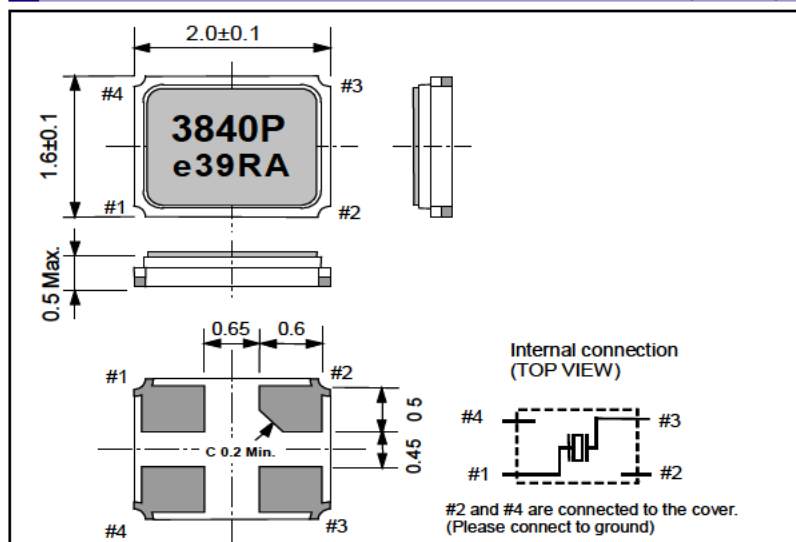
Product name FA2016AA 24.000000MHz 12.0 +10.0-10.0
(Standard form) ① ② ③ ④

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

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

