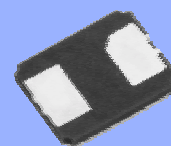




MHz RANGE CRYSTAL UNIT FOR AUTOMOTIVE APPLICATIONS

FA-23A

- Frequency range : 12 MHz to 54 MHz
- Thickness : 0.8 mm Max.
- Overtone order : Fundamental
- Applications : Accessories and ECU sub clock



Actual size



Specifications (characteristics)

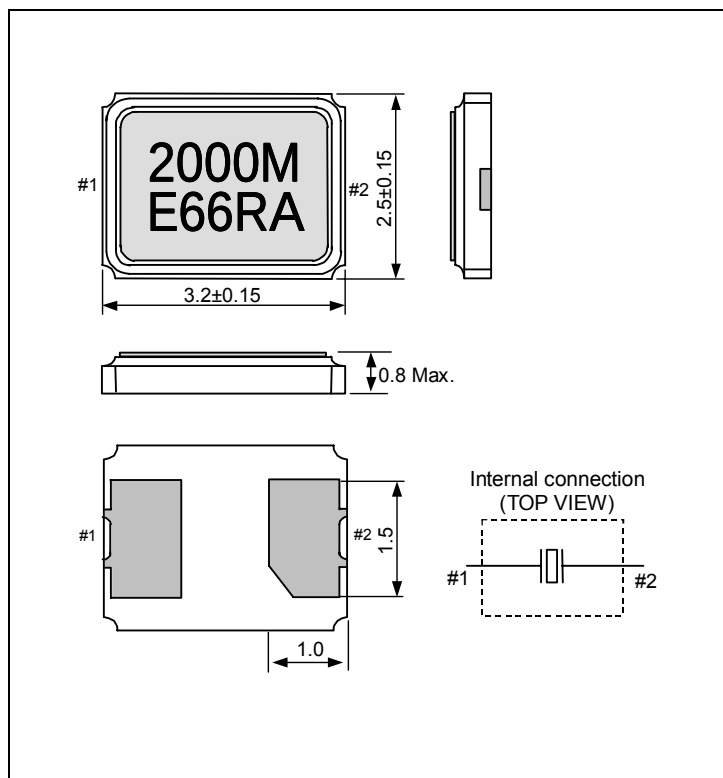
Item		Symbol	Specifications	Remarks
Nominal frequency range		f	12 MHz to 54 MHz	Fundamental
Temperature range	Storage temperature	T_stg	-40 °C to +125 °C	Store as bare product after unpacking
	Operating temperature	T_use	-40 °C to +125 °C	
Level of drive		DL	100 μW Max.	
Frequency tolerance (standard)		f_tol	$\pm 10 \times 10^{-6}$	+25 °C
Frequency versus temperature characteristics (standard)		f_tem	$\pm 20 \times 10^{-6}$	-40 °C to +85 °C
			$\pm 50 \times 10^{-6}$	-40 °C to +125 °C
Load capacitance		CL	7 pF to ∞ (standard: 9 pF, 12 pF, 16 pF, ∞)	Please specify
Motional resistance (ESR)		R1	As per below table	
Frequency aging		f_age	$\pm 5 \times 10^{-6}$ / year Max.	+25 °C, First year

Motional resistance (ESR)

Frequency	Motional resistance
12.0 MHz $\leq$ f < 16.0 MHz	100 Ω Max.
16.0 MHz $\leq$ f < 20.0 MHz	80 Ω Max.
20.0 MHz $\leq$ f < 27.0 MHz	60 Ω Max.
27.0 MHz $\leq$ f $\leq$ 54.0 MHz	40 Ω Max.

External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

