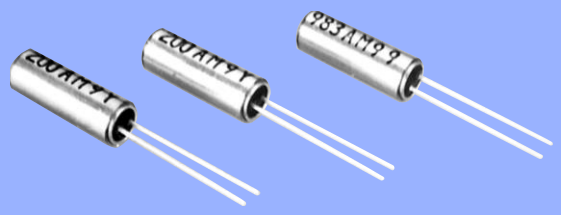
MHz RANGE CRYSTAL UNIT
CYLINDER

CA - 301

- Frequency range : 4 MHz to 64 MHz
- Thickness : ϕ3.1 mm Max.
- Overtone order : Fundamental
  3rd overtone (30 MHz to 64 MHz)
- Applications : For Clock of integrated circuit

Pb Free RoHS Compliant

Product Number (please contact us)
Q21CA3011xxxx00



Actual size

Specifications (characteristics)

Item	Symbol	Specification	Conditions / Remarks
Nominal frequency range	f_nom	4.000 MHz to 29.999 MHz	Fundamental *1
		30.000 MHz to 64.000 MHz	3rd overtone *2
Storage temperature	T_stg	-40 °C to +85 °C	Store as bare product.
Operating temperature	T_use	-20 °C to +70 °C	The operating temperature range is -10 °C to +60 °C for 5.5 MHz and below
Level of drive	DL	10 μW to 100 μW	
Frequency tolerance (standard)	f_tol	±30 × 10^{-6}(Under 5.5 MHz:±50 × 10^{-6}, ±100 × 10^{-6})	+25 °C
Frequency versus temperature characteristics (standard)	f_tem	Under 5.5 MHz: ±50 × 10^{-6}	-10 °C to +60 °C
		Over 5.5 MHz: ±30 × 10^{-6}	-20 °C to +70 °C
Load capacitance	CL	Fundamental: 10 pF to ∞.	Please specify
		Overtone: 5 pF to ∞	
Motional resistance (ESR)	R_1	As per below table	-20 °C to +70 °C, DL=100 μW
Frequency aging	f_age	±5 × 10^{-6} / year Max.	+25 °C, First year

*1 4.0 MHz ≤ f_nom < 5.5 MHz : See “Available frequencies from 4.0 MHz to less than 5.5 MHz”. 8.0 MHz < f_nom < 8.2 MHz: Unavailable.
*2 26.000 MHz ≤ f_nom <30.000 MHz :please contact us for inquiries for 3rd overtone mode.

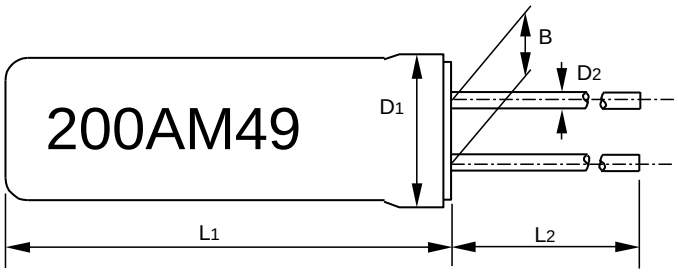
Available frequencies from 4.0 MHz to less than 5.5 MHz (MHz)

4.000	4.032	4.096	4.190	4.194304	4.433619	4.500	4.800	4.9152

Motional resistance (ESR)

Frequency (MHz)	4 ≤ f_nom < 5.5	5.5 ≤ f_nom < 6	6 ≤ f_nom < 10	10 ≤ f_nom < 12	12 ≤ f_nom < 16	16 ≤ f_nom < 30	30 ≤ f_nom ≤ 36	36 < f_nom ≤ 64
Motional resistance	150 Ω Max.	100 Ω Max.	80 Ω Max.	60 Ω Max.	50 Ω Max.	40 Ω Max.	100 Ω Max.	80 Ω Max.
Overtone order	Fundamental						3rd overtone	

External dimensions (Unit:mm)



Frequency	L_1	L_2	D_1	D_2	B
Under 5.5 MHz	9.3 Max.	9.5 Min.	ϕ 3.1 Max.	ϕ 0.3	1.1
Over 5.5 MHz	8.9 Max.	9.5 Min.	ϕ 3.1 Max.	ϕ 0.3	1.1