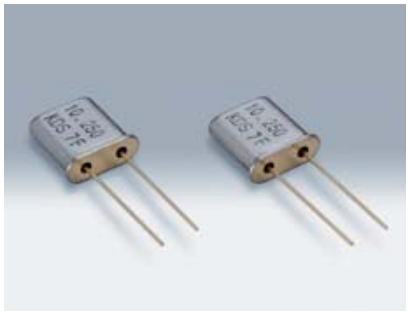
Crystal Resonators / MHz Band Crystal Resonators

UM-1, UM-4, UM-5, HC-49/U



The UM series of resonators offers excellent frequency stability and are ideal for a wide range of mobile radio communications. The designs offer excellent shock resistance and reliability, and despite the small size there is no trade off with the performance. In addition, the HC series is designed for use in microprocessors and other standard clocks, offering excellent frequency stability.

Pb-Free

RoHS Compliant

■ Features

- Resonator with a high frequency stability ideal for use in mobile radio communications.
- High precision and high reliability
- Taped and reeled allowing for automatic surface mounting. (HC-49/U)

■ Standard Specification

Item \ Type	UM-1	UM-5	UM-4	HC-49/U
Frequency Range	10～150MHz			2.4～125MHz
Overtone Order	Fundamental, 3rd overtone, 5th overtone, 7th overtone			
Load Capacitance	Series, 12pF, 16pF, 20pF, 32pF (Fundamental)			
	8pF, 10pF, 12pF, 16pF (3rd, 5th, 7th overtone)			
Drive Level	10μW, 50μW, 100μW, 500μW			
Frequency Tolerance	±5×10^{-6}, ±10×10^{-6}, ±15×10^{-6}, ±20×10^{-6} , ±30×10^{-6} (at 25℃)			
Series Resistance	50～120Ω max.		50～100Ω max.	25～350Ω max.
Frequency Characteristics over Temperature	±5×10^{-6}, ±10×10^{-6}, ±20×10^{-6}, ±30×10^{-6} , ±50×10^{-6}/−10～+60℃ (Ref. to 25℃)			
Storage Temperature Range	−30～+80℃			
Packing Unit	600pcs.			
Standard Specification	Refer to page 38			

Consult our sales representative for other specifications.

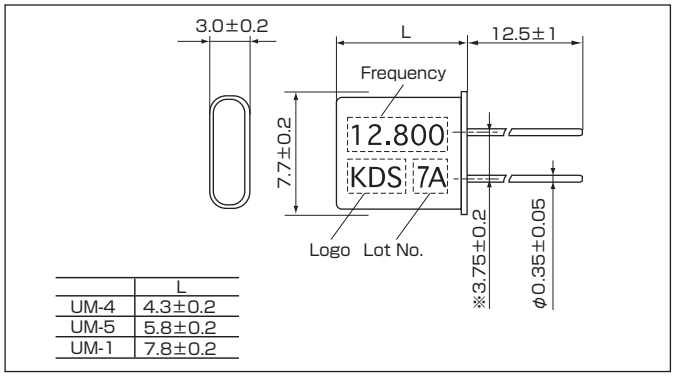
■ Series Resistance

Frequency \ Type	Overtone Order	UM-4 Ω max.	UM-5 Ω max.	UM-1 Ω max.	HC-49/U Ω max.
2.4～ 3.0MHz	F	−	−	−	350
3.0～ 3.5MHz	F	−	−	−	150
3.5～ 4.0MHz	F	−	−	−	90
4.0～ 7.0MHz	F	−	−	−	60
7.0～ 10MHz	F	−	−	−	35
10～ 15MHz	F	50	50	50	35
15～ 20MHz	F	50	50	50	25
20～ 25MHz	F/3	50/−	50/−	50/−	25/50
25～ 30MHz	F/3	50/−	50/−	50/−	25/40
30～ 75MHz	3	70	70	70	40
75～100MHz	3/5	70/−	70/80	70/80	−/60
100～125MHz	5	80	80	80	60
125～150MHz	5	100	100	100	−

Consult our sales representative for other specifications.

F: fundamental 3: 3rd overtone 5: 5th overtone

■ Dimensions[mm]



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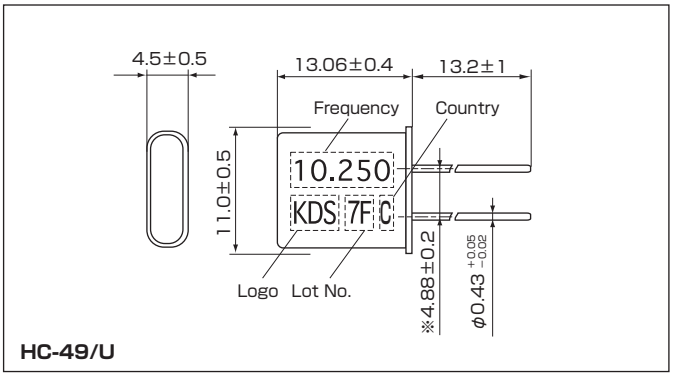
UM-4	4.3±0.2
UM-5	5.8±0.2
UM-1	7.8±0.2



HC-49/U

※Measurement between the root of the leads.