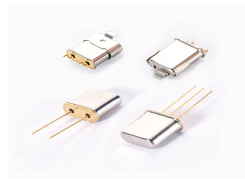


■ Features

- Tight tolerance and stability. Ideal for communication equipment
- AT-cut round shape crystal plate inside. Optimized for low harmonics
- Available up to 200 MHz using fifth overtone crystal mode
- Annealed and Pre-aged for low frequency drift over long -term operation



General Specifications

Item / Type	UM-5 UM-5J series
Frequency Range	10.0 ~ 200MHz
Load Capacitance	Series Resonance or Parallel (8 to 32 pF typical)
Drive Level	100μ W (500μ W max.)
Frequency Tolerance	AT-cut: ± 5 ppm , ± 10 ppm , ± 20 ppm or ± 30 ppm at 25°C
	SL-cut: ± 50 ppm at 25°C
Frequency Stability	See Table 2
Aging	ΔF / F : ±3 ppm / year (max.)
Storage Temperature Range	- 50°C to 105°C

Table 1

UM-5 & UM-5J Series Resistance (max.)

Freq.(MHz)	Osc. Mode	E.S.R.	Freq.(MHz)	Osc. Mode	E.S.R.
10.0 ~ 11.9	AT , Fund.	60 Ω	90.0~135.0	AT , 3rd	40 Ω
12.0 ~ 14.9	AT , Fund.	50 Ω	90.0~159.0	AT , 5th	100 Ω
15.0 ~ 35.0	AT , Fund.	30 Ω	160.0~200.0	AT , 5th	80 Ω
35.0 ~ 90.0	AT , 3rd	60 Ω			

Table 2

Frequency stability Vs Operating temperature range

Temp. (°C) \ ppm	± 5	± 10	± 15	± 20	± 25	± 30	± 50	± 100 (SL-cut)
X -10 to 60°C	○	○	○	○	○	○	○	○
Y -20 to 70°C	▲	○	○	○	○	○	○	○
I -40 to 85°C		▲	○	○	○	○	○	○

○ : available ; ▲ : contact Mercury

Outline Dimensions (Unit : mm)

Dip type UM-5	Jacket type UM-5J