



**PRODUCTS**

**Crystal Unit (Through Hole)**

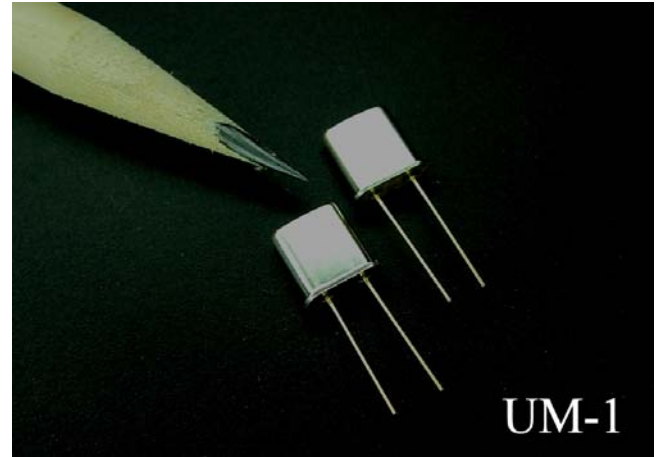
**Typical Applications:**

- Set-Top Box
- PCs
- Microcontrollers and Processors
- Consumer Electronic

**UM-1  
(UM Series)**

**Part Number: M-Freq-CL**

**Example: M-6.000-18**



**Specification** UM1

Part No.	Example
M-Freq-CL	M-6.000-18

**Specification** UM-1

Frequency Range	6.0 to 150.0MHz
Mode of Oscillation	Fundamental / 3rd / 5th Overtone
Tolerance at 25°C	±10 to ±50ppm
Temperature Stability	±10 to ±50ppm
Operating Temperature Range	-10°C to +60°C
Storage Temperature Range	-40°C to +85°C
Load Capacitance	8 to 32pF / Series
ESR	* See Table Below
Drive Level	100µW Max.
Aging	±5ppm/year Max.

\*UM-1 ESR Table

Oscillation Mode	Frequency Range (MHz)	ESR (Ohm)
Fundamental	6.0 to 9.9	70 Max.
	10.0 to 19.9	50 Max.
	20.0 to 30.0	30 Max.
3rd Overtone	30.0 to 70.0	60 Max.
5th Overtone	50.0 to 150.0	100 Max.

**Dimension** (Unit: mm)

