



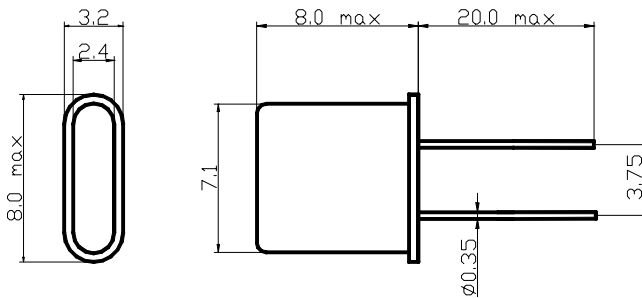
M1 TYPE--UM-1 PACKAGE

Standard Specifications

Frequency Range (MHz)	10.000~200.000
Mode of Vibration	10.000~30.000MHz Fundamental 30.000~90.000MHz 3 rd Overtone 60.000~150.000MHz 5 th Overtone 90.000~200.000MHz 7 th Overtone
Drive Level (mW)	0.1 TYPICAL
Load Capacitance (pF)	8.0pF MIN
Frequency Tolerance (ppm)	± 10, ± 30
Shunt Capacitance (pF)	7 (MAX)
Operating Temperature Range	-20°C ~70°C
Frequency Stability (refer to 25°C)	± 10ppm, ± 30ppm
Storage temperature Range	-40°C ~+85°C
Aging (refer to 25°C)	± 5ppm (First Year)

Equivalent Series Resistance

Frequency Range (MHz)	ESR (MAX) (Ω)	Frequency Range (MHz)	ESR (MAX) (Ω)
10.000~15.000	40	60.000~150.000	100
15.000~30.000	25	90.000~200.000	150
30.000~90.000	60		



All Dimensions in mm

