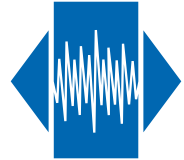


UM-4, UM-5, UM-1 Slim



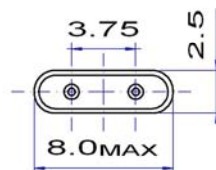
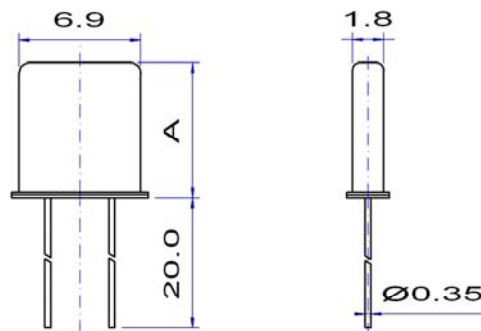
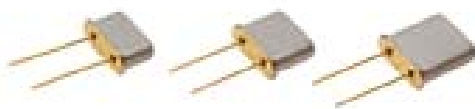
Metal packaged through hole Crystal

Features

- Applications: telecommunications, audio, navigation, instruments
- High frequency accuracy in stability and aging
- Wide frequency range: 8 to 250 MHz
- Thin package (slim)

Parameter	Specification	
Frequency range	8 ~ 80 MHz 30 ~ 180 MHz 80 ~ 250 MHz	fundamental 3 rd overtone 5 th overtone
Mode of oscillation	AT cut 3 rd & 5 th overtone	
Standard frequencies	10.00, 10.368, 15.36, 20.48, 20.945, 80.00, 100.00 125.00, 155.52 & 175.00 MHz	
Frequency tolerance	±5 ~ ±20 ppm	@ +25 °C
Frequency stability	±5 ~ ±20 ppm	vs. operating temperature range
Aging	< ±1 ppm	1 st year
Load capacitance	series or parallel resonance (CL = 8 ~ 32 pF)	
Equivalent series resistance (ESR)	< 20 Ω @ 10 MHz < 12 Ω @ 32 MHz	
Drive level	10 ~ 100 μW	
Operating temperature range	-20 ~ +70 °C -40 ~ +85 °C -40 ~ +125 °C	commercial application industrial application automotive & avionic application
Storage temperature range	-55 ~ +125 °C	
Packaging	tray or plastic bag	
Customer specifications on request		

Type	UM-4	UM-5	UM-1
A [mm]	4.4	6.0	8.0



2002/95/EC RoHS compliant