



UM1
UM5

Features:

- Tight tolerance and stability
- Wide frequency range
- Low ESR

Specifications		Symbol	UM1	UM5	Remarks
Frequency range		f	6.000MHz ~ 50.000MHz	8.000MHz ~ 50.000MHz	Fundamental
			30.000MHz ~ 120.000MHz	40.000MHz ~ 120.000MHz	3rd Overtone
			75.000MHz ~ 200.000MHz		5th Overtone
Frequency tolerance, Ta=25°C		f/f	±3ppm ~ ±50ppm		Please specify
Load capacitance		C _L	5pF ~ 50pF		Please specify
Temperature tolerance		f/f	±3ppm ~ ±50ppm		Please specify
Temperature range	Storage temperature	T _{STG}	-40°C ~ +105°C		
	Operating temperature	T _{OPR}	-20°C ~ +70°C		Others are offered
Drive level	Maximum drive level	M _{DL}	1000µW		
	Recommended drive level	R _{DL}	10µW ~ 100µW		
Series resistance		R ₁	As per table		25°C ±3°C
Shunt capacitance		C ₀	7pF		Max
Insulation resistance		I _R	500M Ohm		Min
Aging		f _A	±5ppm/Year max		Others are offered

Resistance of series resonance (ESR)					
Frequency (MHz)	Mode	Ohm max	Frequency (MHz)	Mode	Ohm max
6 ≤ f < 10	Fundamental	40	30 ≤ f < 120	3rd OT	40
10 ≤ f < 50	Fundamental	25	75 ≤ f < 200	5th OT	60

Drawing

SERIES	H
UM 1	8.0max
UM 5	5.8max

Dimensions in mm

Order key								
Q	- 20.000000M	- UM1	- F	- 30	- 50	- C	- 30	- 3P
Part	Frequency	Package	Mode of oscillation	Frequency tolerance	Temperature tolerance	Temperature range	Load capacitance	Option
Q=Quartz	M=MHz	UM1 UM5	F=fund. 3=3.OT 5=5.OT	±ppm (25°C)	±ppm (Temp. range)	A= 0°C ~ +70°C B= -10°C ~ +60°C C= -10°C ~ +70°C D= -20°C ~ +70°C E= -40°C ~ +85°C F= -40°C ~ +105°C G= -40°C ~ +125°C H= -20°C ~ +80°C I = -10°C ~ +50°C	pF SR=series	3P=3Pin version MJ=Metal jacket TR=Taped and reeled I=Isolation washers X=Special options