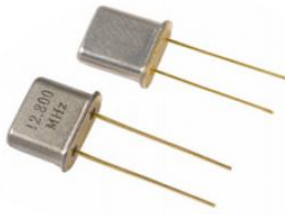


DIP QUARTZ CRYSTAL RESONATOR



2 Pin Dip Crystal 8.0×3.2 mm UM-1

- Resistance welded
- ±2.5ppm available
- Wide frequency range
- AT Cut



RoHS compliant

★ 1. PARAMETERS

PARAMETERS	SPECIFICATION
Frequency Range	8.0 ~ 200MHz
Operation Mode	See Table 3
Loading Capacitance	20pF Std. 8 to 33pF , Series available
Drive Level	100 μ W (300 μ W Max)
Frequency Tolerance	±5ppm ~ ±30ppm (at 25°C)
Equivalent Resistance	See Table 3
Frequency Stability	±2.5ppm ~ ±30ppm
Operating Temp. Range:	0 ~ +50°C to -40 ~ +85°C
Storage Temp. Range:	-55 ~ +125°C

○ All specification subject change without notice.

★ 2. FREQUENCY STABILITY VS. TEMPERATURE

Operation Temperature Range	Frequency Stability				
	±2.5ppm	±5ppm	±10ppm	±20ppm	±30ppm
0°C~+50°C	○	○	○	○	○
-10°C~+60°C	○	○	●	○	○
-20°C~+70°C		○	○	●	○
-40°C~+85°C				○	●

● standard ○ available

★ 3. ESR (SERIES RESISTANCE RS)

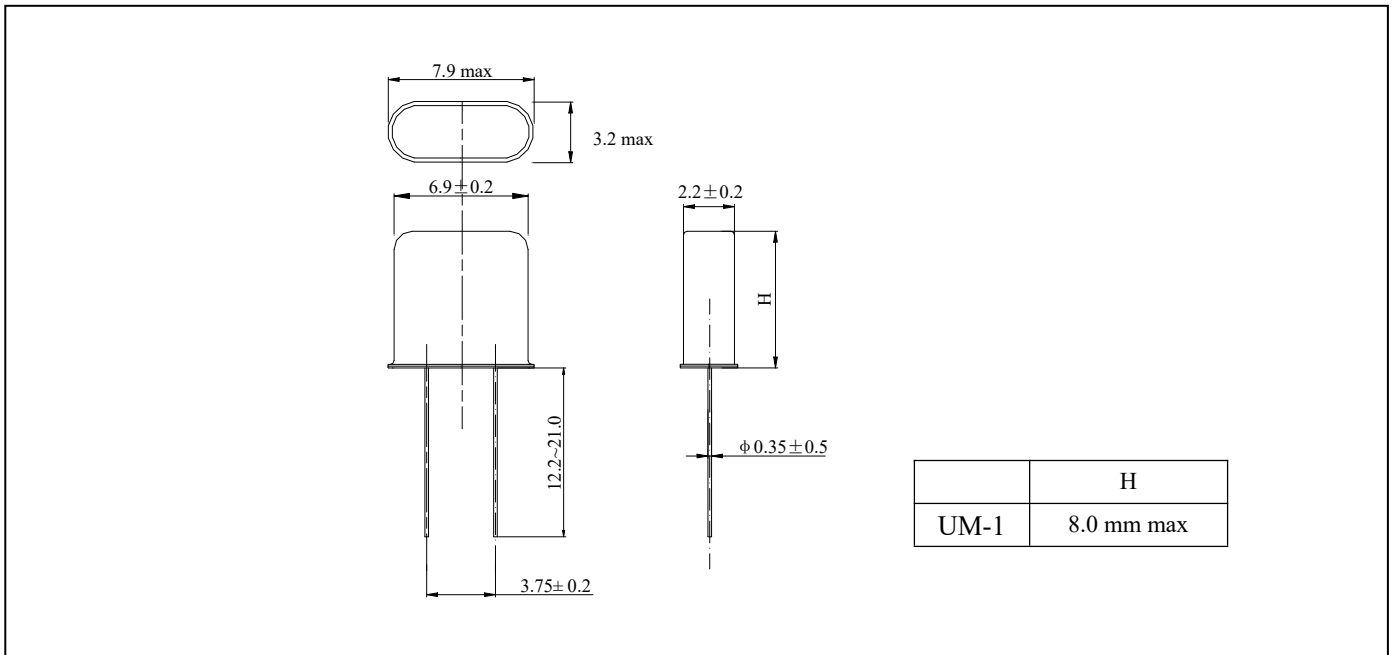
Frequency	Mode	UM-1 (Ω max)	UM-5 (Ω max)
8.0-15.0MHz	FUND.	40	/
15.1-20.0MHz	FUND.	30	40
20.1-30.0MHz	FUND.	25	35
30.1-105.0MHz	3 rd Overtone	45	45
60.0-150.0MHz	5 rd Overtone	100	100
150.0-200.0MHz	7 rd Overtone	150	150

★ PART NUMBER GUIDE e.g. FTX16.000M20U1-10/10B (*U1=UM-1)

Logo	Quartz Crystal Resonator	Frequency Hz	Load Capacitance pF	Package	Frequency Tolerance ppm	Frequency Stability ppm	Operating Temp. Range
FT	X	16.000M	20	U1	10	10	B

Definition	Description	
Operating Temperature Range	A: -10~+60°C	B: -20~+70°C
	C: -30~+80°C	D: -40~+85°C
	S: Customer specified	

★ DIMENSIONS (Unit: mm)



★ WAVE SOLDERING PROFILE

