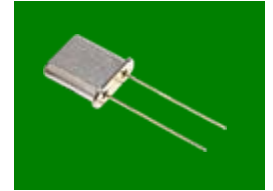


Quartz Crystal Through Hole UM4 Type Leaded Package



Features

- Tight tolerance and stability over temperature
- Wide frequency range
- Excellent frequency source for telecom application
- Rohs Compliant

Electrical Specifications

Frequency Range		10.000 to 200.000	
Mode of Oscillation	Fundamental	10.000 to 65.000	MHz
	Third Overtone	30.000 to 120.000	
	Fifth Overtone	80.000 to 130.000	
	Seventh Overtone	125.000 to 200.000	
Frequency Tolerance at 25°C	Standard	± 30	PPM Max
	Optional	± 25 to ±10	
Frequency Stability over Temperature Range	Standard	±50	
	Optional	±30 to ±10	
Operating Temperature Range	Standard	-20 to +70	°C
	Extended	-40 to +85	
Storage Temperature Range		-55 to +125	
Aging		±5 first year ±3 thereafter	PPM Max/Year
Load Capacitance		10 to 32 or Series Resonance	pF
Shunt Capacitance		7.0	pF Max
Equivalent Ser Resistance (ESR)		See ESR Table	Ohms
Drive Level		1.0	mW Max
Insulation Resistance		500 at 100Vdc (±15Vdc)	M Ohm

Frequency Range vs. ESR Values

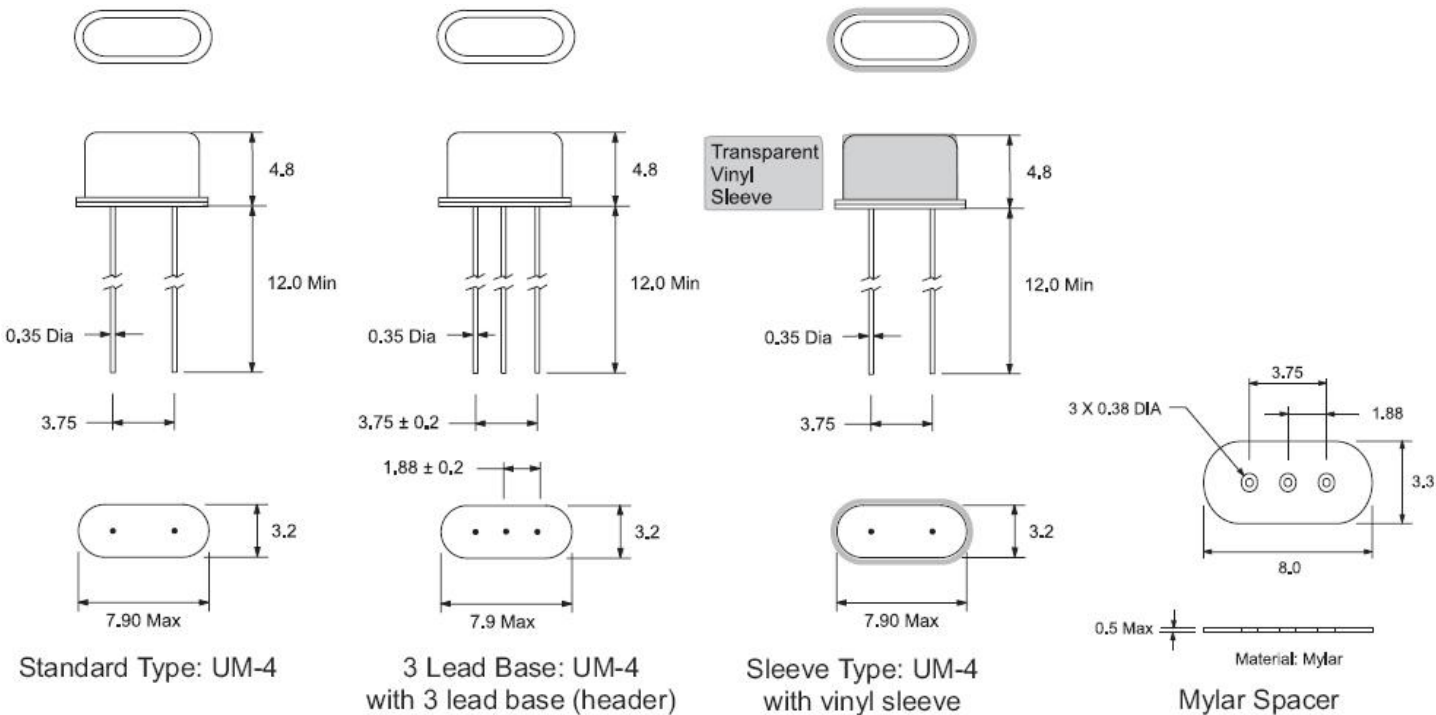
Frequency Range in MHz	ESR Ohms Max	Mode of Operation
10.000 to 11.000	60	Fundamental
11.100 to 65.000	40	Fundamental
30.000 to 120.000	70	Third / Fifth Overtone
80.000 to 130.000	100	Fifth / Seventh Overtone
125.000 to 200.000	150	Seventh Overtone

Part Numbering System

Type	-	Frequency	-	Load Capacitance	-	Mode(*1)	-
WDC4 (UM4 type)		in MHz		10 to 32 for Parallel or S for Series		3OT – Third Overtone 5OT – Fifth Overtone 3OT – Seventh Overtone	
Tolerance/ Stability(*1)		Extended Temperature(*1)		Package Options(*1)			
(PPM/PPM) e.g. 2030		EXT		Cx – x mm ±10% L – 3 lead header P – Mylar Spacer S – Vinyl Sleeve			

Examples : WDC4-24.576-18 or WDC4-54.000-S-3OT-2050-EXT-P or WDC4-18.000-20-C10

Mechanical Outline



Notes:

- 1 – Fundamental Mode, Standard Tolerance/Stability, Standard Temperature Range and Standard Package, do not need to be included in Part Number description.
- 2 – Lead Length (pre-cut) package option is available from 3 to 10mm. Bulk package only.
- 3 – Product is shipped in Bulk. 1000 pieces per box, 10 plastic bags containing 100 pieces
- 4 – Tape & Reel packaging is available for 1000pieces minimum
- 5 – Specification subject to change without notice.