

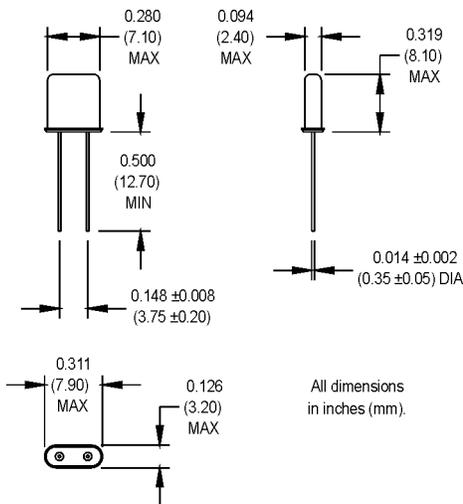
# UM-1 and UM-5 Crystals



The UM series of miniature resistance weld crystals are suitable for applications where tight specs, small footprint, and wide frequency range is important.

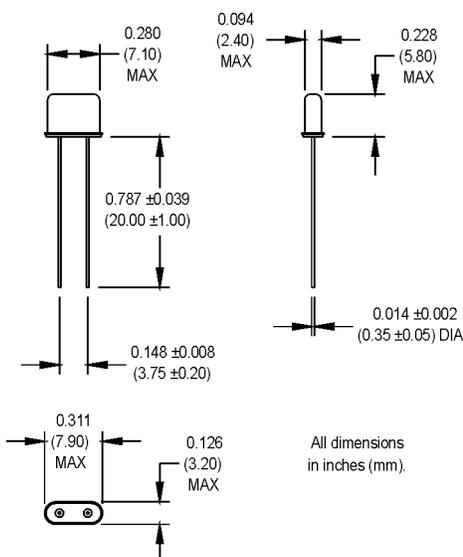
## Electrical/Environmental Specifications

### UM-1 00.0000 MHz (customer specified)



Refer to page 146 for gull wing configuration.

### UM-5 00.0000 MHz (customer specified)



Refer to page 146 for gull wing configuration.

PARAMETERS	UM-1/*SRUM-1	UM-5/*SRUM-5
Frequency Range (MHz)	6.000 to 200.000	12.000 to 200.000
Tolerance @ +25°C	±25 ppm	±25 ppm
Stability	±35 ppm	±35 ppm
Aging	±5 ppm/yr. Max.	±5 ppm/yr. Max.
Shunt Capacitance	7 pF Max.	7 pF Max.
Load Capacitance	18 pF Std.	18 pF Std.
Standard Operating Conditions	-20°C to +70°C	-20°C to +70°C
Equivalent Series Resistance (ESR), Max.		
Fundamental (AT-cut)		
6.000 to 7.999 MHz	120 Ω	
8.000 to 9.999 MHz	80 Ω	
10.000 to 17.999 MHz	40 Ω	40 Ω
18.000 to 30.000 MHz	30 Ω	30 Ω
Third Overtones (AT-cut)		
25.000 to 29.999 MHz	50 Ω	50 Ω
30.000 to 75.000 MHz	45 Ω	45 Ω
Fifth Overtones (AT-cut)		
50.000 to 143.000 MHz	90 Ω	90 Ω
Seventh Overtones (AT-cut)		
125.000 to 180.000 MHz	140 Ω	140 Ω
Ninth Overtones (AT-cut)		
180.000 to 200.000 MHz	150 Ω	150 Ω
Drive Level	1 mW Max.	1 mW Max.
Holder	UM-1	UM-5
Mechanical Shock	MIL-STD-202, Method 213, C	
Vibration	MIL-STD-202, Method 201 & 204	
Solder Conditions	See page 147	
Thermal Cycle	MIL-STD-883, Method 1010, B	

\* Series resonant designated by "SR" prefix (i.e., SRUM-1).  
Contact the factory for specifications not listed.

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