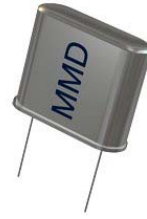


U Series Crystal



- **UM-1 Thru-Hole Crystal**
- **Wide Frequency Range**
- **AT Cut**
- **RoHS Compliant Available**



ELECTRICAL SPECIFICATIONS:

| | |
|------------------------------------|--|
| Frequency Range | 7.000MHz to 200.000MHz |
| Frequency Tolerance / Stability | (See Part Number Guide for Options) |
| Operating Temperature Range | (See Part Number Guide for Options) |
| Storage Temperature | -55°C to +125°C |
| Aging | ±5ppm / first year max |
| Shunt Capacitance | 7pF max |
| Load Capacitance | 20pF Standard (See Part Number Guide for Options) |
| Equivalent Series Resistance (ESR) | See ESR Chart |
| Mode of Operation | Fundamental, 3 rd OT |
| Drive Level | 1mW Max |
| Shock | MIL-STD-883, Meth 2002, Cond B |
| Solderability | MIL-STD-883, Meth 2003 |
| Solvent Resistance | MIL-STD-202, Meth 215 |
| Vibration | MIL-STD-883, Meth 2007, Cond A |
| Gross Leak Test | MIL-STD-883, Meth 1014, Cond C |
| Fine Leak Test | MIL-STD-883, Meth 1014, Cond A |

ESR CHART:

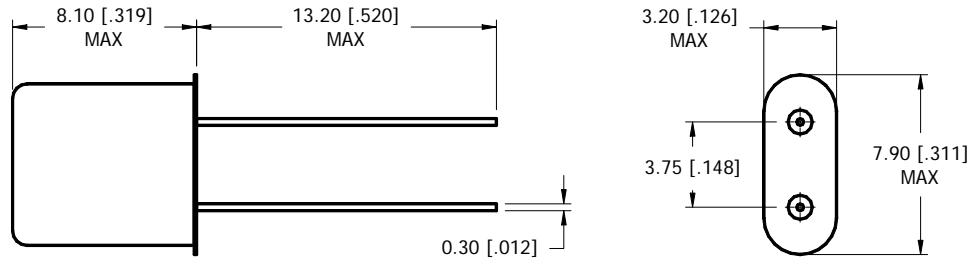
| Frequency Range | ESR (Ohms) | Mode / Cut |
|-------------------------|------------|-------------------------|
| 7.000MHz to 40.000MHz | 40 Max | Fund / AT |
| 24.000MHz to 34.999MHz | 60 Max | 3 rd OT / AT |
| 35.000MHz to 125.000MHz | 40 Max | 3 rd OT / AT |
| 60.000MHz to 200.000MHz | 60 Max | 3 rd OT / AT |

MARKING:

Line 1: MXX.XXX
XX.XXX = Frequency in MHz

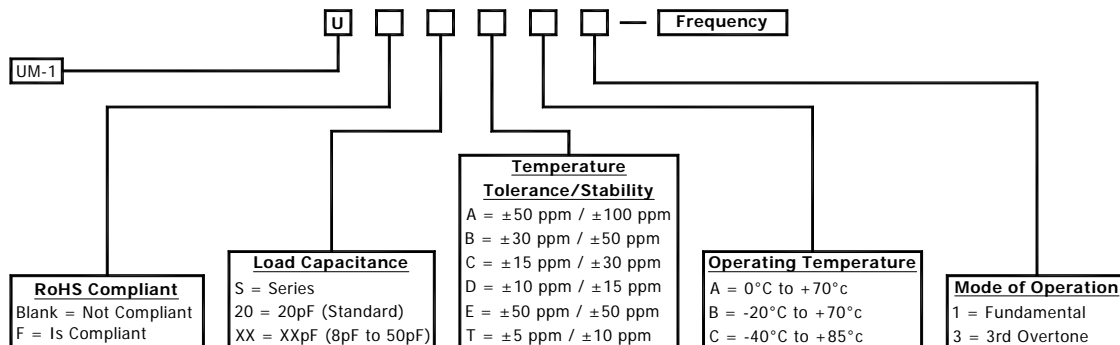
Line 2: SYMCCCL
S = Internal Code
YM = Date Code (Year/Month)
CC = Crystal Parameters Code
L = Denotes RoHS Compliant

MECHANICAL DETAILS:



DIMENSION IN BRACKETS ARE IN INCHES

PART NUMBER GUIDE:



Please Consult with MMD Sales Department for any other Parameters or Options

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