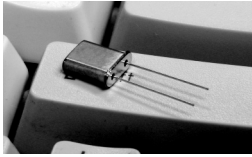


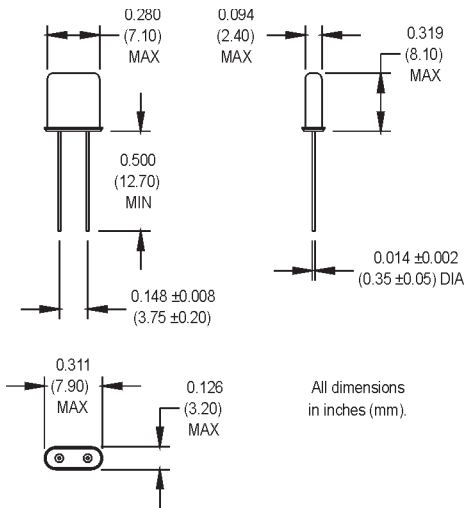
# UM-1 and UM-5 Crystals



- Miniature resistance weld package
- High Frequency Fundamental (HFF) to 155.52 MHz
- Tight stability and excellent aging characteristics
- Surface mount version available

## UM-1

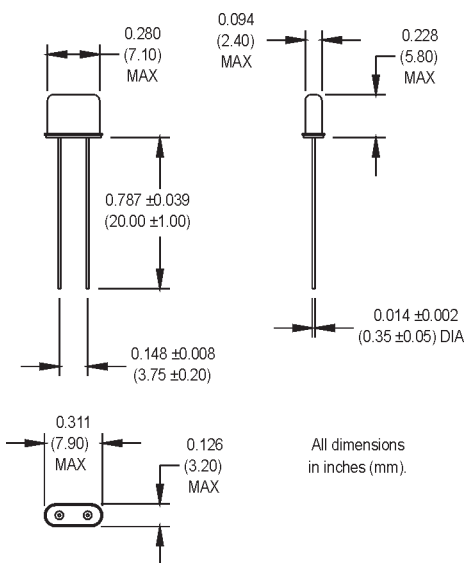
M1010Sxxx - Contact factory for datasheet.



See next page for gull wing configuration.

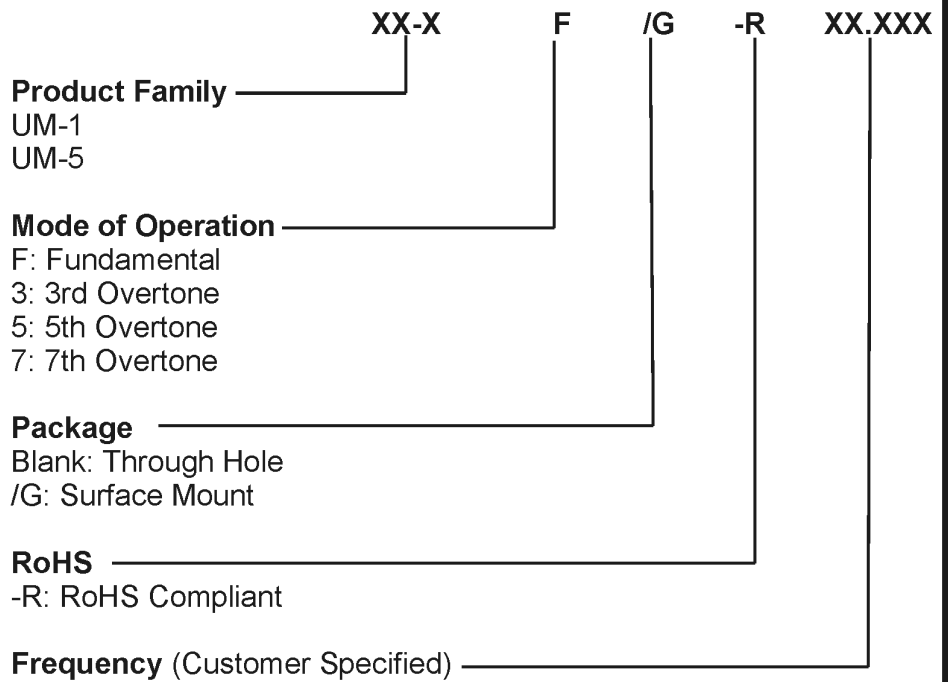
## UM-5

M1019Sxxx - Contact factory for datasheet.



See next page for gull wing configuration.

### Ordering Information

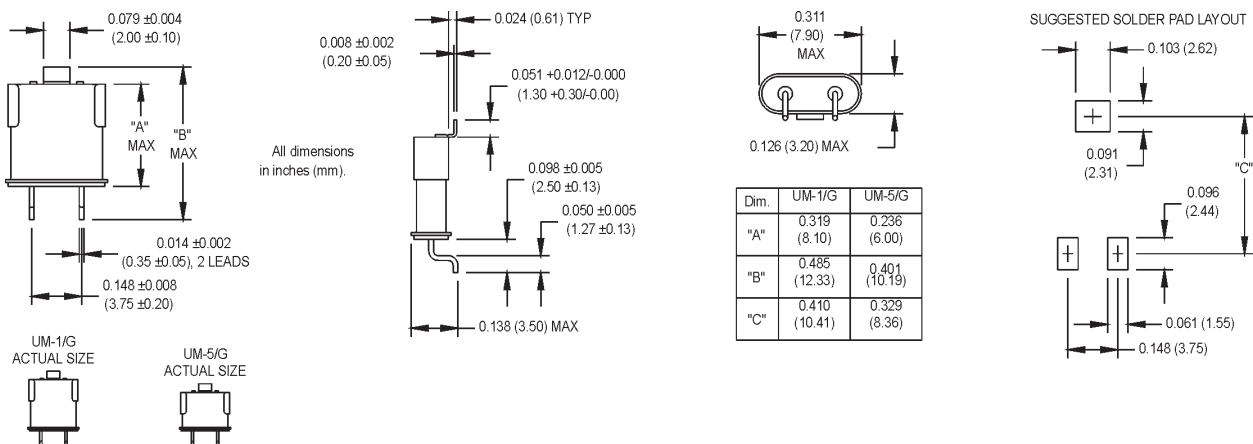


# UM-1 and UM-5 Crystals

Electrical Specifications	Parameters	UM-1 & UM-1/G	UM-5 & UM-5/G
	Frequency Range	6.000 to 200.000 MHz	12.000 to 200.000 MHz
	Frequency Tolerance @+25°C	±25 ppm	±25 ppm
	Frequency Stability	±35 ppm	±35 ppm
	Frequency Vs. Aging @+25°C	±5 ppm/yr max.	±5 ppm/yr max.
	Shunt Capacitance (C <sub>0</sub> )	7 pF max.	7 pF max.
	Load Capacitance	18 pF	18 pF
	Motional Capacitance	N/A	N/A
	Operating Temperature	-20°C to +70°C	-20°C to +70°C
	Pullability (Contact Factory)		
Drive Level	1 mW max. 10 µW min.	1 mW max. 10 µW min.	
Equivalent Series Resistance (ESR)			
Fundamental 6.000 to 7.999 MHz	120 Ohms max.		
Fundamental 8.000 to 9.999 MHz	80 Ohms max.		
Fundamental 10.000 to 17.999 MHz	40 Ohms max.	40 Ohms max.	
Fundamental 18.000 to 39.999 MHz	30 Ohms max.	30 Ohms max.	
Fundamental 40.000 to 155.52 MHz	30 Ohms max.	Not Available	
3 <sup>rd</sup> OT 25.000 to 29.999 MHz	50 Ohms max.	50 Ohms max.	
3 <sup>rd</sup> OT 50.000 to 75.000 MHz	45 Ohms max.	45 Ohms max.	
5 <sup>th</sup> OT 50.000 to 143.000 MHz	90 Ohms max.	90 Ohms max.	
7 <sup>th</sup> OT 125.000 to 180.000 MHz	140 Ohms max.	140 Ohms max.	
9 <sup>th</sup> OT 180.000 to 200.000 MHz	150 Ohms max.	150 Ohms max.	
Environmental	Shock	MIL-STD-202, Method 213, Condition C	
	Vibration	MIL-STD-202, Methods 201 & 204	
	Solderability	Pre EIAJ-STD-002	
	Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B	
	Maximum Wave Soldering Conditions (Through hole devices only)	+260°C for 10 secs.	+260°C for 10 secs.

## Gull Wing/Surf Board Configurations

### UM-1/G and UM-5/G Standard Gull Wing Crystals



MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see [www.mtronpti.com](http://www.mtronpti.com) for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.