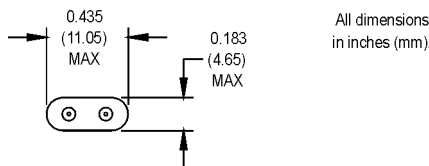
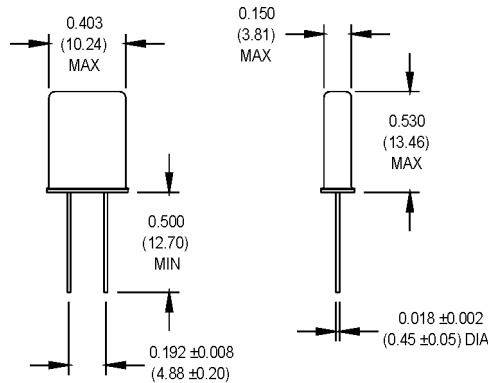


ATS-49 and MP-1 Crystals



***ATS-49 00.0000 MHz** (customer specified)

MP-1 (HC-49/U) 00.0000 MHz (customer specified)



All dimensions
in inches (mm).

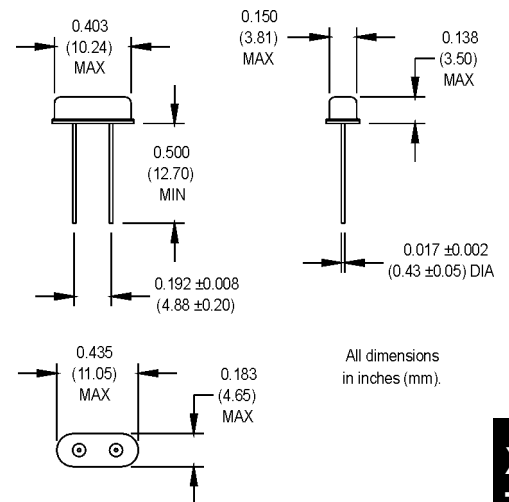
NOTES:

Series resonant designated by "SR" prefix (i.e., **SRATS-49** or **SRMP-1**).

ATS-49

Because this product is based on AT-strip technology, not all frequencies in the range stated are available. Contact the factory for availability of specific frequencies.

BT cut fundamentals from 24.000 to 40.000 MHz have a stability of ± 100 ppm.



All dimensions
in inches (mm).

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Equivalent Series Resistance (ESR), Max.

Fundamental (AT-cut)

1.8432 to 1.999 MHz

2.000 to 2.399 MHz

2.400 to 3.299 MHz

3.300 to 3.569 MHz

3.570 to 3.999 MHz

4.000 to 5.999 MHz

6.000 to 7.999 MHz

8.000 to 10.999 MHz

11.000 to 14.999 MHz

15.000 to 19.999 MHz

20.000 to 34.000 MHz

Third Overtones (AT-cut)

20.000 to 49.999 MHz

50.000 to 75.000 MHz

Fifth Overtones (AT-cut)

50.000 to 125.000 MHz

Seventh Overtones (AT-cut)

125.000 to 200.000 MHz

MP-1

700 Ω

600 Ω

400 Ω

140 Ω

100 Ω

75 Ω

50 Ω

40 Ω

30 Ω

25 Ω

25 Ω

40 Ω

50 Ω

90 Ω

150 Ω

Equivalent Series Resistance (ESR), Max.

Fundamental (AT-cut)

3.579 to 3.999 MHz

4.000 to 4.999 MHz

5.000 to 5.999 MHz

6.000 to 9.999 MHz

10.000 to 13.999 MHz

14.000 to 40.000 MHz

Fundamental (BT-cut)

24.000 to 50.000 MHz

Third Overtones (AT-cut)

25.000 to 39.999 MHz

40.000 to 72.000 MHz

ATS-49

200 Ω

150 Ω

120 Ω

100 Ω

80 Ω

50 Ω

100 Ω

100 Ω

80 Ω

Electrical Specifications	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
	Frequency Range	F	1.8432		200	MHz	MP-1
			3.579545		72	MHz	ATS-49
	Frequency Tolerance	F/F			± 30	ppm	
	Frequency Stability	$\Delta F/F$			± 50	ppm	
	Operating Temperature	T _A	-10		+70	°C	
	Storage Temperature	T _s				°C	
	Aging						
	1st Year						
	Thereafter (per year)						
	Load Capacitance	C _L		18		pF	
	Shunt Capacitance	C ₀			7	pF	
	ESR		See ESR Tables				
	Drive Level	D _L			1	mW	MP-1
					500	μ W	ATS-49
	Insulation Resistance	I _R	500			M Ω	

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 for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.