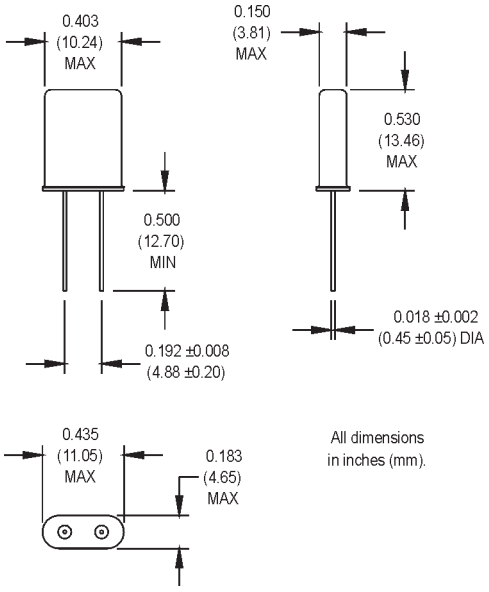
MP-1 Crystals

THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS.

Order by:
MP-1-R (HC-49/U) **00.0000 MHz** (Frequency)

Custom P/N:
M1002Sxxx - Contact factory for datasheet



Equivalent Series Resistance (ESR), Max.	MP-1
Fundamental (AT-cut)	
1.8432 to 1.999 MHz	700 Ω
2.000 to 2.399 MHz	600 Ω
2.400 to 3.299 MHz	400 Ω
3.300 to 3.569 MHz	140 Ω
3.570 to 3.999 MHz	100 Ω
4.000 to 5.999 MHz	75 Ω
6.000 to 7.999 MHz	50 Ω
8.000 to 10.999 MHz	40 Ω
11.000 to 14.999 MHz	30 Ω
15.000 to 19.999 MHz	25 Ω
20.000 to 34.000 MHz	25 Ω
Third Overtones (AT-cut)	Note 2
20.000 to 49.999 MHz	40 Ω
50.000 to 75.000 MHz	50 Ω
Fifth Overtones (AT-cut)	Note 3
50.000 to 125.000 MHz	90 Ω
Seventh Overtones (AT-cut)	Note 4
125.000 to 200.000 MHz	150 Ω

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
Electrical Specifications	**Frequency Range**	F	1.8432		200	MHz	
	Frequency Tolerance	F/F	-30		+30	ppm	
	Frequency Stability	ΔF/F	-50		+50	ppm	
	Operating Temperature	T_A	-10		+70	℃	
	Storage Temperature	T_S	-55		+125	℃	
	Aging Per Year			±5	±5		
	Load Capacitance	C_L		18		pF	See Note 1
	Shunt Capacitance	C_O			7	pF	
	ESR		See ESR Table				
	Drive Level	D_L	50	100	1000	µW	
	Insulation Resistance	I_R	500			MΩ	
Environmental	**Mechanical Shock**	MIL-STD-202, Method 213, C (100 g's)					
	Vibration	MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)					
	Thermal Cycle	MIL-STD-883, Method 1010, B (-55°C to 125°C, 15 min dwell, 10 cycles)					
	Hermeticity	MIL-STD-202, Method 112 (1 x 10^{-8} atmcc/sec. min.)					
	Solderability	Per EIAJ-STD-002					
	Max Wave Soldering Conditions	+260℃ for 10 secs. Max.					

Note 1: Series resonant designated "SR" prefix (i.e., SRMP-1-R)
Note 2: Order by P/N 302-000-R-Frequency
Note 3: Order by P/N 309-000-R-Frequency. This is a series resonant part.
Note 4: Order by P/N 320-000-R-Frequency. This is a series resonant part.