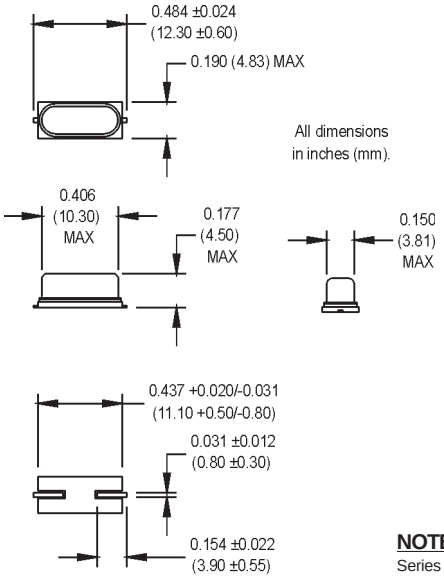
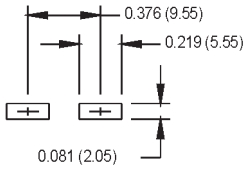
ATSM-49 and SX2050 Surface Mount Crystals

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



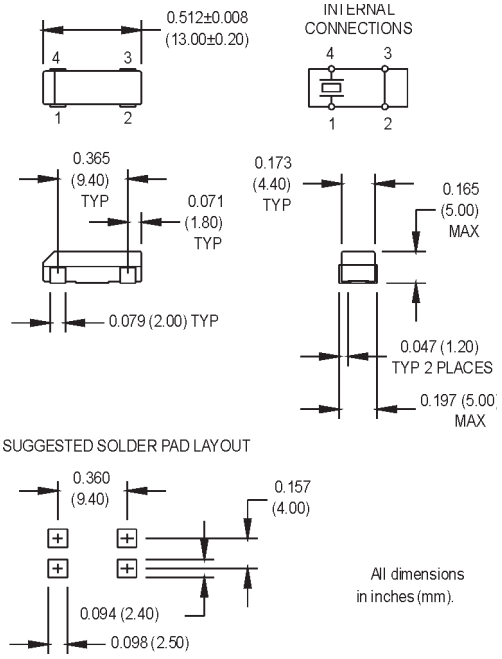
SUGGESTED SOLDER PAD LAYOUT



Equivalent Series Resistance (ESR), Max.	ATSM-49
Fundamental (AT-cut)	
3.579 to 3.999 MHz	200 Ω
4.000 to 4.999 MHz	150 Ω
5.000 to 5.999 MHz	120 Ω
6.000 to 9.999 MHz	100 Ω
10.000 to 13.999 MHz	80 Ω
14.000 to 40.000 MHz	50 Ω
Fundamental (BT-cut)	
24.000 to 50.000 MHz	100 Ω
Third Overtones (AT-cut)	
25.000 to 39.999 MHz	100 Ω
40.000 to 72.000 MHz	80 Ω

Equivalent Series Resistance (ESR), Max.	Sx2050
Fundamental (AT-cut)	
3.579 to 3.999 MHz	200 Ω
4.000 to 4.499 MHz	150 Ω
4.500 to 4.999 MHz	120 Ω
5.000 to 6.999 MHz	100 Ω
7.000 to 8.999 MHz	80 Ω
9.000 to 9.999 MHz	60 Ω
10.000 to 12.999 MHz	50 Ω
13.000 to 18.999 MHz	35 Ω
19.999 to 30.000 MHz	25 Ω
Fundamental (BT-cut)	
30.000 to 40.000 MHz	30 Ω
Third Overtones (AT-cut)	
36.000 to 60.000 MHz	80 Ω

***SX2050 00.0000 MHz** (customer specified)



SUGGESTED SOLDER PAD LAYOUT

All dimensions
in inches (mm).

NOTES:

Series resonant designated by "SR" prefix (i.e., **SR**ATSM-49 or **SR**SX2050).

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.

ATSM-49

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

Electrical Specifications	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
	Frequency Range	F	3.579545		72	MHz	ATSM-49
			3.579545		60	MHz	SX2050
	Frequency Tolerance	F/F			±30	ppm	ATSM-49
					±50	ppm	SX2050
	Frequency Stability	ΔF/F			±50	ppm	ATSM-49
					±100	ppm	SX2050
	Operating Temperature	TA	-10		+70	°C	ATSM-49
			-20		+70	°C	SX2050
	Storage Temperature	TS				°C	
	Aging						
	1st Year						
	Thereafter (per year)						
	Load Capacitance	CL		18		pF	
	Shunt Capacitance	Co			7	pF	ATSM-49
					5	pF	SX2050
	ESR		See ESR Tables				
	Drive Level	DL			500	μW	ATSM-49
					100	μW	SX2050
	Insulation Resistance	IR	500			MΩ	