

1. Part Number: F490U-(see part number guide below)

2. Description: A 1.8432 to 200 MHz quartz crystal resonator in a HC-49 package using fundamental, 3rd, 5th and 7th overtone modes.

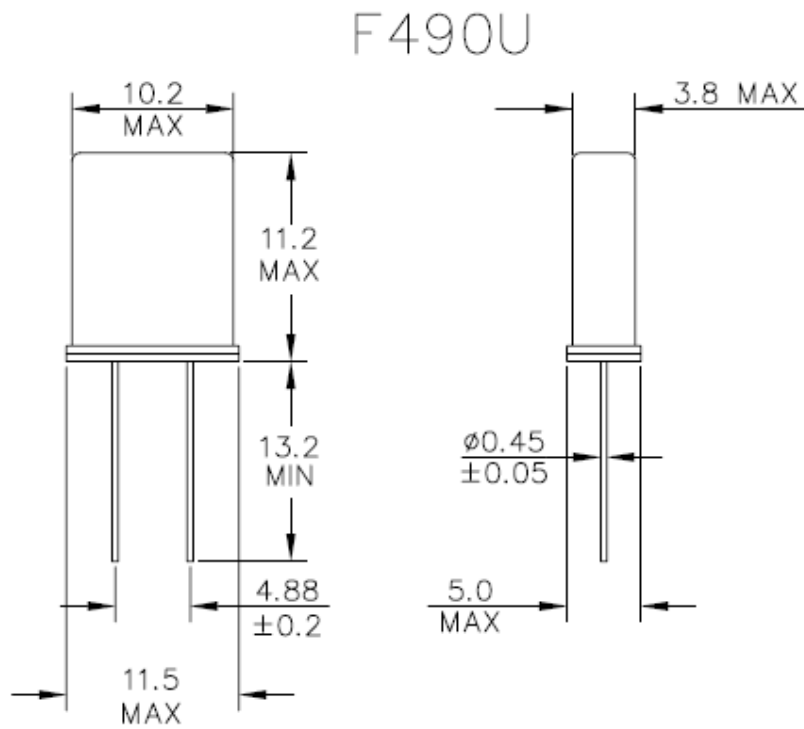
3. Electrical Specifications:

Model	F490U		
Frequency Range	1.8432 to 200 MHz		
Crystal Cut	AT		
Mode of Oscillation	Fundamental, 3 rd , 5 th , & 7 th OT		
Frequency Tolerance at 25°C	±2.5 to ±50ppm max		
Shunt Capacitance (Co)	7.0 pF Max		
Load Capacitance (Cl)	8 to 50 pf or Series		
Aging	±1 to ±5ppm per year		
Insulation Resistance	500 Mohm min @ 100 Vdc		
Drive Level	10 to 2000 u W max		
Storage Temperature	-40 to +85°C		
Equivalent Series Resistance	Frequency (MHz)	Mode	ESR (ohms)
	1.8432 to 3	FUND	500
	3 to 3.5	FUND	180
	3.5 to 4	FUND	140
	4 to 5	FUND	80
	5 to 6	FUND	70
	6 to 13	FUND	45
	13 to 32	FUND	25
	24 to 29	3 rd	55
	30 to 79	3 rd	35
	80 to 125	5 th	85
	120 to 160	7 th	120
	20 to 120	3 rd	60
	80 to 200	5 th	80

4. Part Number Guide:

Base Model	Cut	Mode of Operation	Circuit Condition	Calibration at 25°C	Temperature Stability Options (°C)	Frequency
F490U	AT	1: Fund 3: 3 rd OT 5: 5 th OT 7: 7 th OT	S: Series 8: 8 pf 10: 10pf 12: 12pf 16: 16pf x: specify	2.5:±2.5 ppm 05: ± 5 ppm 10:± 10ppm 25 :±25 ppm 50: ±50 ppm 100:±100ppm x: custom	AE : ±5ppm -5 to 55° AF: ±5ppm -10 to 60° AG: ±10ppm -15 to 65° AH: ±10ppm -20 to 70° AJ: ±12ppm -25 to 75° AK: ±15ppm -30 to 80° AL: ±15ppm -40 TO 85° A: ±100ppm -20 to 70° C: ±100ppm -10 to 60° D: ±50ppm -20 to 70° G: ±50ppm -10 to 60°	1.8 to 200 MHz
F490U	AT	1	S	25	D	10.0 MHz

5. Mechanical Package:



Drawing subject to change with out notice