

Quartz

Thru Hole

ADX49S Series

OSC

VCXO
VCOTCXO
VCTCXO

FLTR

RES

IND

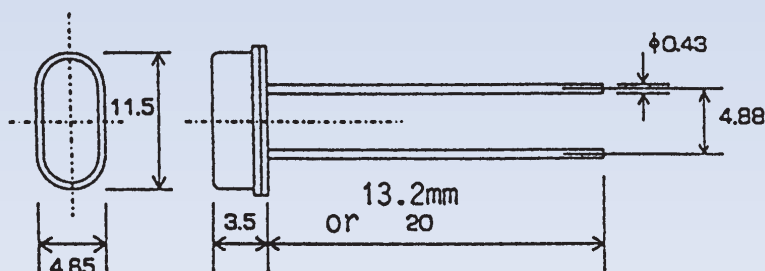
ADX49S



FEATURES

- The ADX-49S is a high-performance miniature crystal unit manufactured with ultrahigh-precision processing technology.
- Excellent vibration resistance, shock resistance and environmental characteristics.
- Applications: AV equipment, OA equipment, communication equipment and measuring instruments.

UNIT DIMENSION (unit: mm)



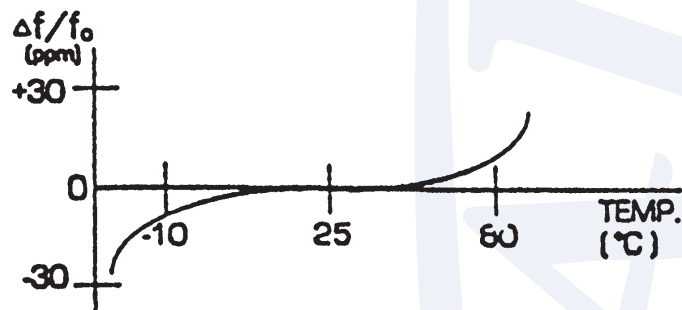
STANDARD SPECIFICATIONS

Package Type		ADX49S	Conditions
Frequency Range	F	3.500 MHz ~ 60.000 MHz	Fundamental
Frequency Tolerance 25°C	# f/F	±30 ppm or ±50 ppm	Reference Temperature
-10°C ~ +70°C			
Freq. vs. Temperature Characteristics		±30 ppm or ±50 ppm	Adjustment Tolerance
Operating Temperature Range		-10°C ~ +70°C	
Storage Temperature Range		-40°C ~ +85°C	
Equivalent Series Resistance	Rs	See Drawing	
Load Capacitance	CL	Please Specify	
Shunt Capacitance	Co	7 pF max.	
Drive Level	DL	100 μW	
Insulation Resistance		500 MΩ min.	DC 100V ±15V
Aging (for first year)	# f/F	±5 ppm max.	T = 25°C ±3°C
Sealing		1 x 10 ⁻⁷ mber-/sec. max.	
Shock Resistance		±10 ppm max.	
		Drop Test of 3 times on a Hard Board from 75 cm Height.	

EQUIVALENT SERIES RESISTANCE (E.S.R.)

Frequency (MHz)	Vibration Code	E.S.R. max.
2.5 MHz to 3.8 MHz	Fundamental	150Ω
3.81 MHz to 4.1 MHz	Fundamental	120Ω
4.11 MHz to 5.0 MHz	Fundamental	100Ω
5.01 MHz to 6.0 MHz	Fundamental	80Ω
6.01 MHz to 8.0 MHz	Fundamental	70Ω
8.01 MHz to 10 MHz	Fundamental	60Ω
10.01 MHz to 12 MHz	Fundamental	50Ω
12.01 MHz to 26 MHz	Fundamental	40 ~ 50Ω
28.0 MHz to 30 MHz	3rd Overtone	60 ~ 80Ω

FREQUENCY vs. TEMPERATURE CHARACTERISTICS



SEE PAGE 33 FOR PART NUMBERING GUIDE

Quartz Part Numbering Guide

Thru Hole

ADX Series

OSC

VCXO
VCO

TCXO
VCTCXO

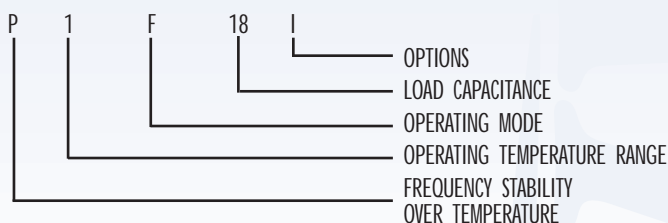
FLTR

RES

IND

Package Type	UM-1	ADXUM1	pg34	HC42/U	ADX42	pg34	HC49/U	ADX49	pg34	HC49/T	ADX49T	pg36
	UM-2	ADXUM2	pg34	HC43/U	ADX43	pg34	HC49/S	ADX49S	pg35	HC50/U	ADX50	pg36
	UM-5	ADXUM5	pg34	HC47/U	ADX47	pg34	HC49/SS	ADX49SS	pg36	HC50/T	ADX50T	pg36
	HC36/U	ADX36	pg34	HC48/U	ADX48	pg34	HC49/SS	ADX49SS1	pg36			
Frequency	MHz		M	KHz		K						
Frequency Tolerance @ 25°C	±100ppm		A	±40ppm		D	±25ppm		G	±10ppm		J
	±50ppm		B	±35ppm		E	±20ppm		H	±5ppm		K
	±45ppm		C	±30ppm		F	±15ppm		I			
Frequency Stability Over Temperature	±100 ppm		P	±40 ppm		S	±25 ppm		V	±10 ppm		Y
	±50 ppm		Q	±35 ppm		T	±20 ppm		W	±5 ppm		Z
	±45 ppm		R	±30 ppm		U	±15 ppm		X			
Operating Temperature Range	0°C to +70°C		1	-20°C to +70°C		3	-40°C to +85°C		5	0°C to +55°C		7
	-10°C to +60°C		2	-40°C to +75°C		4	-40°C to +90°C		6	-40°C to +125°C		8
Operating Mode	Fundamental		F	5th Overtone		5	9th Overtone		9			
	3rd Overtone		3	7th Overtone		7						
Load Capacitance	6 pF	6		18 pF	18		30 pF	30		Series	S	
	10 pF	10		20 pF	20		32 pF	32				
	12 pF	12		22 pF	22		50 pF	50				
Options	Third Lead		L	Insulator Tab		I	Tape & Reel		T	Vinyl Sleeving		V

EXAMPLE



Package Type	ADX26T	pg37		ADX309	pg39	
	ADX38T	pg38		ADX310	pg39	
Frequency	MHz	M	KHz		K	
Frequency Tolerance @ 25 C	±100ppm	A	±35ppm		E	
	±50ppm	B	±30ppm		F	
	±45ppm	C	±25ppm		G	
	±40ppm	D	±20ppm		H	
Load Capacitance	6pF	6	7pF	7	12.5pF	12.5
Option	Bulk		Blank		Tape & Reel	T

