

Pin Type - 11.05 x 13.46 x 4.65mm

Features

Low cost & wide applications Tight tolerance and Stability RoHS compliant

General Specification

Туре	HC-49U
Frequency Range	1.8432MHz to 150.000MHz
Frequency Tolerance at 25 ℃	<u>+</u> 10ppm to <u>+</u> 100ppm *
Frequency Stability	\pm 10ppm to \pm 100ppm *
Operating Temperature	-10°C to +60°C *
Load Capacitance	6pF to 32pF / Series
Shunt Capacitance	7pF max *
Storage Temperature	-40°C to +85°C *
Drive Level	100μW *
Aging	± 5ppm max first year *

^{*} Can be changed according to Customer's requirement.

Drive Level Codes (μW)

A = 100	B = 200	D = 50	E = 300	G = 500	I = 10	
---------	---------	--------	---------	---------	--------	--

Load Capacitance Codes

12pF = A	12.5pF = B	14pF = C	16pF = D	17pF = E	18pF = F
20pF = G	25pF = H	30pF= I	32pF = J	33pF = K	Series = L
13pF = M	27pF = N	50pF = O	10pF = P	15pF = Q	22pF = R
15.8pF = S	8.5pF = T	8.2pF = U	40pF = V	9pF = W	11pF = X
13.8pF = Y	19.6pF = Z	6pF = a	7pF = d	8pF = e	19pF = f

• Operating Temperature Codes (°C)

A = -10 to +60	B = -20 to +70	C = -10 to +70	I = -40 to +85	X = -30 to +80	W = -10 to +50
------------------	------------------	------------------	------------------	------------------	------------------

• Frequency Tolerance & Frequency Stability Codes (ppm)

P = +10	S = +20	T = +30	U = +50	V = +100	W = +5
110	5 <u></u> 20	150	<u> </u>	, <u>-</u> 100	,, <u>-</u>

Pls contact us for the parameters you could not find in these tables.

NEWXTAL - New Crystal

• Frequency Stability vs. Operating Temperature

	<u>+</u> 10ppm	<u>+</u> 10ppm <u>+</u> 20ppm		<u>+</u> 50ppm	<u>+</u> 100ppm
-10℃- +60℃	·	\odot	•	\odot	\odot
-10°C-+70°C	·	\odot	•	\odot	\odot
-20°C- +70°C	·	\odot	•	•	\odot
-40°C-+85°C			\odot	•	\odot

⊙ Available

• Standard

• ESR (Series Resistance Rs) vs Standard Frequency, Vibration Mode & Codes

Frequency Range	ESR Max	Code	Vibration Mode	Code
(MHz)	(Ω)			
1.8432 - 2.300	500	3	AT Fund	A
2.3001 - 3.000	400	2	AT Fund	A
3.0001 - 4.000	90	6	AT Fund	A
4.0001 - 5.000	90	5	AT Fund	A
5.0001 - 8.000	60	4	AT Fund	A
8.0001 - 40.00	30	6	AT Fund	A
24.000 - 80.000	50	2	3rd OT	a3
80.000 - 150.000	100	b	5th OT	a5

Remark: ESR can be adjusted to other frequencies than typical mentioned. In such case, please approach Company for verification.

Marking

 $Frequency + M \ (MHz) \ + \ Date \ code \ (\ Year \ Code + Month \ Code \)$

NEWXTAL (Company brand)

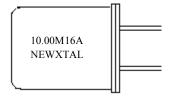
Year Code:

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12	13	14	15	16	17	18	19	20	21	22	23

Month Code:

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
A	В	С	D	Е	F	G	Н	Ι	J	K	L

For Example:

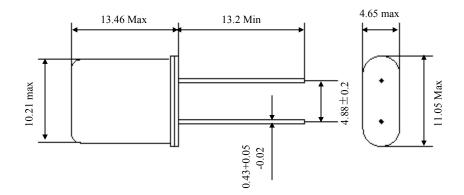


• Ordering Information

Drive Level	Load Capacitance	Operating Temperature	Frequency Tolerance	Frequency Stability	ESR	Туре	Vibration Mode	Frequency	Lead-free	Packing
(µW)	(pF)	(℃)	(ppm)	(ppm)	(Ω)			(MHz)		
	See Tables						See Table	xx.xxxM	LF	Blank=bulk
100	20	-10 to +60	<u>+</u> 30	<u>+</u> 50	30		AT Fund		Lead-free	
A	G	A	T	υ	7	A	A	_	LF	_

For Example: AGATU7AA-10.000MLF

Dimensions

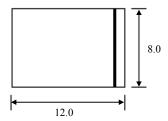


in mm

NEWXTAL - New Crystal

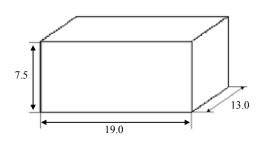
Bulk Packing Specification

1. Plastic Bag:



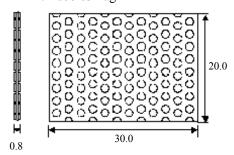
A plastic bag contains: 100pcs

3. Inside Paper Box



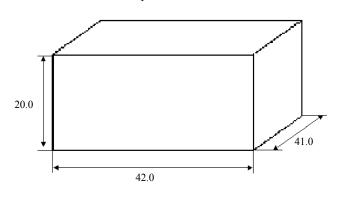
An inside box contains: 1 bubbles bag - 1,000pcs

2. Bubbles Bag



A bubbles bag contains: 10 plastic bags - 1,000pcs

4. Outside Paper Carton



An outside carton contains: 10 inside boxes - 10,000pcs

in cm

Wave Soldering Profile

