

Resistance Welded Holder Type Crystal Unit



The XT49U series is an industry standard AT cut crystal housed in a HC-49U package. It is our standard resistance weld type quartz crystal.

FEATURES

- Low cost
- Industry standard
- Excellent aging
- Wide frequency range
- “AT” cut crystal
- 100 % Lead (Pb)-free and RoHS compliant

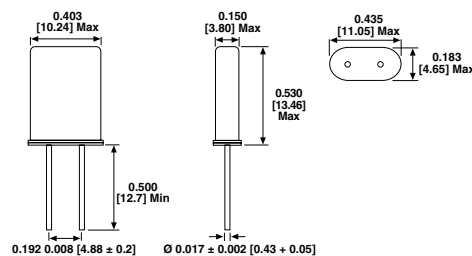


RoHS
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS						
PARAMETER	SYMBOL	CONDITION	UNIT	MIN	TYPICAL	MAX
Frequency Range	F_O		MHz	1.8432		125
Frequency Tolerance	$\Delta F/F_O$	at 25 °C	ppm	± 10	± 30	± 50
Temperature Stability	TC	ref to 25 °C	ppm	± 10	± 30	± 50
Operating Temperature Range	T_{OPR}		°C	- 20		+ 70
Storing Temperature Range	T_{STG}		°C	- 40		+ 85
Shunt Capacitance	C_O		pF			7
Load Capacitance	CL	Customer Specified	pF	10		Series
Insulator Resistance	IR	100 V_{DC}	$M\Omega$	500		
Drive Level	DL		μW		100	500
Aging	Fa	at 25 °C, per year	ppm	- 5.0		+ 5.0

EQUIVALENT SERIES RESISTANCE (ESR) AND MODE OF VIBRATION (MODE)					
FREQUENCY RANGE (MHz)	MAX ESR (Ω)	MODE	FREQUENCY RANGE (MHz)	MAX ESR (Ω)	MODE
1.8432 to 1.999	650	Fundamental	6.000 to 7.999	50	Fundamental
2.000 to 2.999	500	Fundamental	8.000 to 12.999	35	Fundamental
3.000 to 3.499	250	Fundamental	13.000 to 32.000	25	Fundamental
3.500 to 3.999	150	Fundamental	24.000 to 29.999	60	3 rd Overtone
4.000 to 4.999	100	Fundamental	30.000 to 79.999	40	3 rd Overtone
5.000 to 5.999	80	Fundamental	80.000 to 125.000	90	5 th Overtone

DIMENSIONS in inches [millimeters]

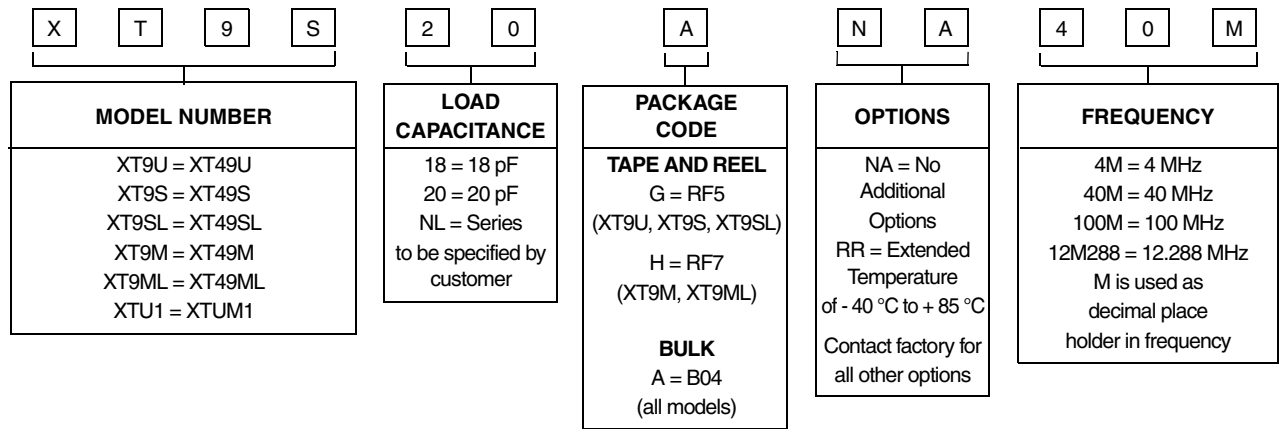


ORDERING INFORMATION					
XT49U MODEL	R OTR Blank = Standard R = - 40 °C to + 85 °C	-20 LOAD Blank = Series - 16 = 16 pF - 20 = 20 pF - 30 = 30 pF - 32 = 32 pF	SP OPTIONS Blank = Standard SL = Sleeve SP = Spacer	M FREQUENCY/MHz	e2 JEDEC LEAD (Pb)-FREE STANDARD

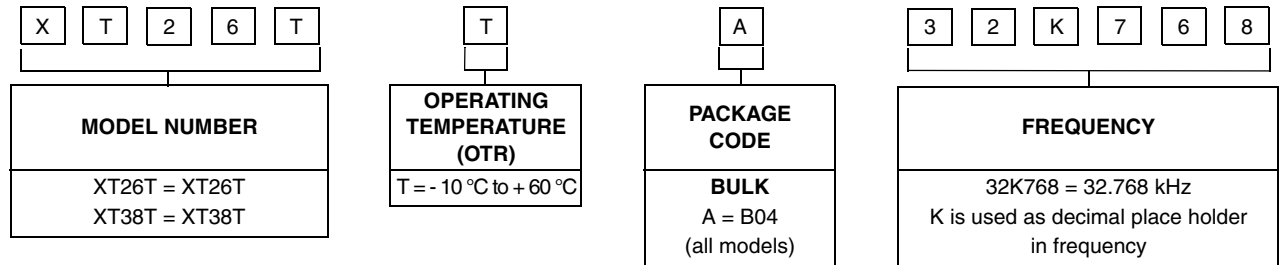
GLOBAL PART NUMBER										
X	T	9	U	2	0	A	N	A	4	M
MODEL				LOAD STABILITY		PACKAGE CODE	OPTIONS		FREQUENCY	



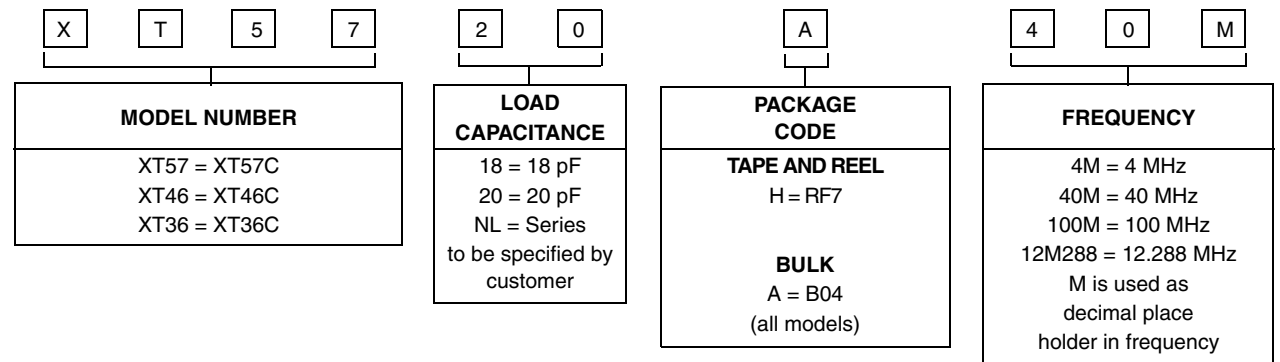
GLOBAL PART NUMBERING



Example: XT49S-20 40M



Example: XT26T 32.768K



Example: XT57C-20 40M



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.