

Resistance Welded Miniature Crystal Units



The XTUM-1 crystal unit is a miniature resistance welded package that provides excellent hermetic seal and frequency aging. The frequency range till 125 Mhz and miniature size is ideal for communication equipment.

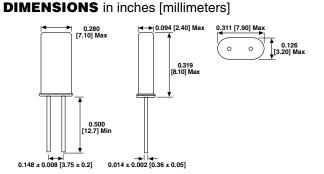
FEATURES

- · Low cost
- · Industry standard
- · Small compact size
- Wide frequency range
- · High stability
- "AT" cut crystal
- 100 % Lead (Pb)-free and RoHS compliant

STANDARD ELECTRICAL SPECIFICATIONS						
PARAMETER	SYMBOL	CONDITION	UNIT	MIN	TYPICAL	MAX
Frequency Range	Fo		MHz	10		125
Frequency Tolerance	$\Delta F/F_0$	at 25 °C	ppm		± 10	± 50
Temperature Stability	TC	see Frequency Stability	ppm		± 10	± 50
Operating Temperature Range	T _{OPR}	vs Temperature Range	°C			
Storing Temperature Range	T _{STG}		°C	- 40		+ 85
Shunt Capacitance	Co		pF			7
Load Capacitance	CL	Customer Specified	pF	10		Series
Insulator Resistance	IR	100 V _{DC}	MΩ	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)

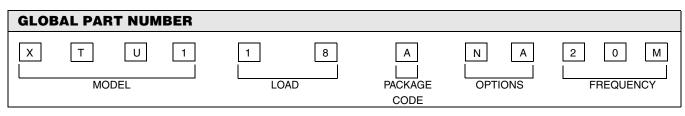
FREQUENCY RANGE (MHz)	MAX ESR (Ω)	MODE
10.000 to 12.999	60	Fundamental
13.000 to 19.999	40	Fundamental
20.000 to 29.999	30	Fundamental
30.000 to 39.999	60	Fundamental
40.000 to 59.999	50	Fundamental
60.000 to 79.999	50	3 rd Overtone
80.000 to 125.000	100	5 th Overtone



FREQUENCY STABILITY VS TEMPERATURE RANGE (25 °C ± 3 °C)

TEMPERATURE RANGE (°C)	FREQUENCY STABILITY (PPM)					
	± 5	± 10	± 15	± 20	± 30	± 50
0 to 50	х	х	х	х	х	х
- 10 to 60	Х	х	х	х	х	х
- 20 to 70		х	Х	Х	Х	х
- 40 to 85				х	х	х

ORDERING INFORMATION					
XTUM1	-18	20 M	e2		
MODEL	LOAD Blank = Series - 32 = 32 pF - 18 = 18 pF Standard	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE STANDARD		

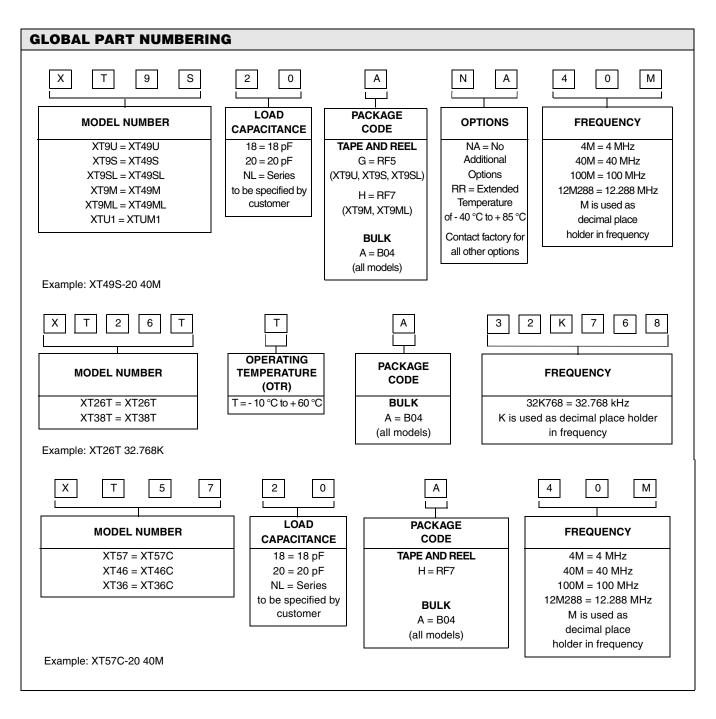




Vishay Dale

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Vishay

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