## **XT26T**

applications.

Vishay Dale



# **Tuning Fork Crystal**



The tuning fork type quartz crystal provides ultimate in size, performance and economic trade-offs. So it is used as a clock source in communication equipment, measuring instrument, microprocessor and other time management

#### **FEATURES**

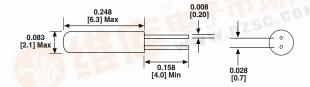
- Miniature package
- Low cost
- KHz frequency
- Tight tolerance
- 100 % Lead (Pb)-free and RoHS compliant



ROHS

STANDARD ELECTRICAL SPECIFICATIONS						
PARAMETER	SYMBOL	CONDITION	UNIT	MIN	TYPICAL	MAX
Frequency Range	Fo		KHz		32.768	
Frequency Tolerance	ΔF/F <sub>O</sub>	at 25 °C	ppm		± 20	
Frequency Coefficient	K	ref to 25 °C	ppm/(∆°C) <sup>2</sup>			- 0.042
Operating Temperature Range	T <sub>OPR</sub>	==-	°C	- 10		+ 60
Storing Temperature Range	T <sub>STG</sub>		°C	- 20		+ 70
Shunt Capacitance	Co		pF		0.85	2
Motional Capacitance	C <sub>1</sub>		fF	1	2	4
Load Capacitance	CL		pF		12.5	
Insulation Resistance	IR	100 V <sub>DC</sub>	MΩ	500		- c0**
Drive Level	DL		μW		T . 075	1
Aging (first year)	Fa	at 25 °C ± 3 °C	ppm	- 5.0	ALM WALL	+ 5.0
Equivalent Series Resistance(ESR)	Rs		KO			50

#### **DIMENSIONS** in inches [millimeters]



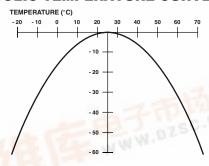
#### **ORDERING INFORMATION**

XT26T 32.768 kHz

FREQUENCY/kHz JEDEC LEAD (Pb)-FREE

STANDARD

#### **PARABOLIC TEMPERATURE CURVE**



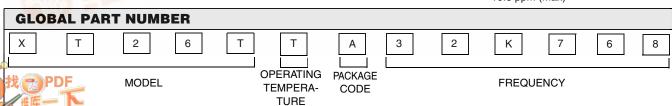
∆F/f (ppm)

To determine frequency stability, use parabolic curvature (k). For example: What is stability at 45 °C?

- 1) Change in Temperature (°C) = 45 25 = 20 °C
- 2) Change in Frequency = 0.042 ppm\*( $\Delta$ °C)

 $= -0.042 \text{ ppm}^*(20)^2$ 

= -16.8 ppm (max)

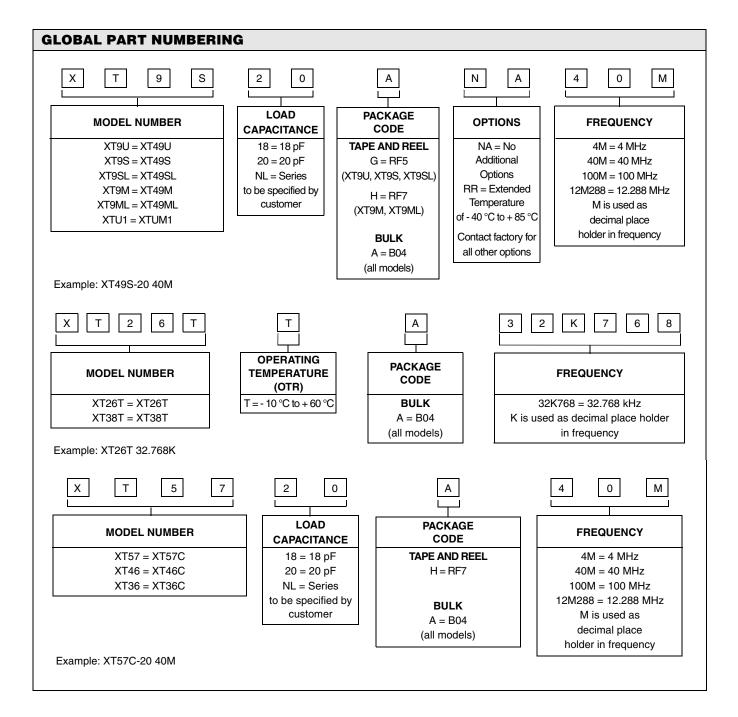


MODEL



### **Tuning Fork Crystal**

Vishay Dale





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Document Number: 91000 www.vishay.com