

SMD Tuning Fork Crystal



Features

- Suited for Automatic mounting and reflow soldering
- Designed for time of day clocks applications
- Small compact size with performance and economy
- Excellent shock and environmental characteristics



Electrical Specifications

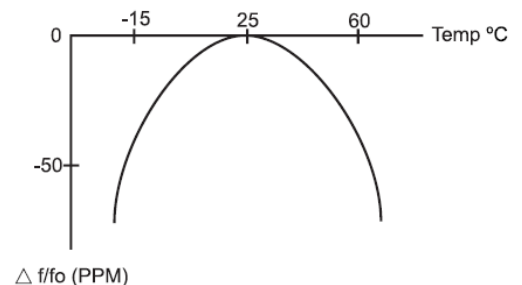
	WT6530	
Normal Frequency	32.768	KHz
Frequency Tolerance at 25°C	±20	PPM
Aging	±5 (first year)	
Turnover Temperature	25 ±5	°C
Temperature Coefficient	-0.035 ±0.01PPM / Δ°C ²	
Temperature Range	-40 to +85	
Temperature Range (Storage)	-55 to +125	
Equivalent Series Resistance	50	K Ohm Max
Load Capacitance	12.5	pF
Shunt Capacitance	1.45	pF Typ
Motional Capacitance	2.8	fF Typ
Drive Level	1.0	uW Max
Insulation Resistance	500 at 100Vdc (±15Vdc)	M Ohm Min
Resistance to Shock	±5PPM maximum offset from 75cm drop test in all axes on to a hard surface	-

Frequency Range vs. ESR Values

For calculating the stability at 45 ° C

1. Change in temperature (ΔT) is (45-25) = +20 ° C
2. Change in frequency is $(-0.035 \times (\Delta^\circ \text{C})^2) = (-0.035 \times (20)^2) = -14 \text{ PPM}$

To calculate the frequency stability the parabolic curvature constant (K) is needed.

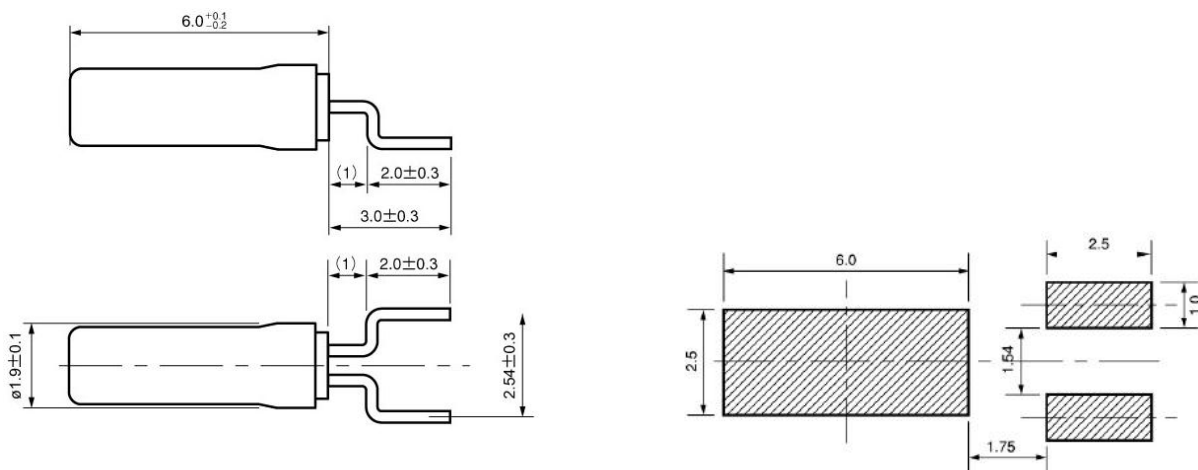


Part Numbering System

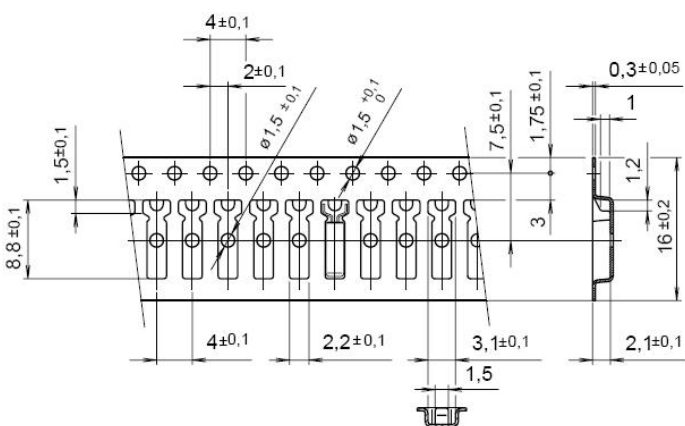
Type	Frequency (KHz)	Load Capacitance (pF)	Tolerance (PPM)	Extended Temperature	Configuration	Tape & Reel
WT6530	32.768	12.5	20	EXT	SMD	TR

Examples : WT6530-32.768-12.5-20-EXT-SMD-TR

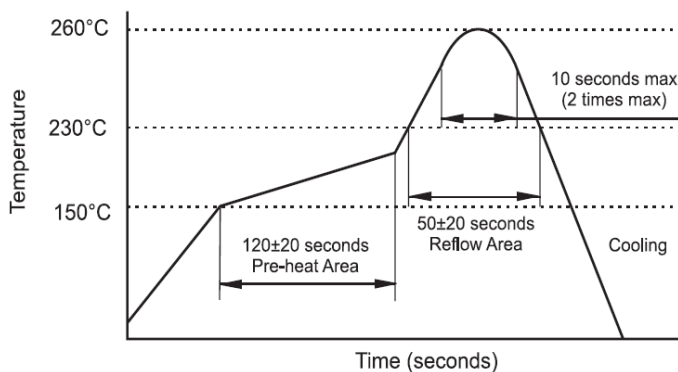
Mechanical Outline



Carrier Tape Dimensions



Solder Reflow Characteristics



Notes:

- 1 - Product is shipped in Tape & Reel package. Each reel contains 2000 pieces.
- 2 - Specification subject to change without notice.