

**DESCRIPTION**

The low frequency SMD Tuning Fork ZM206 with small and compact package is suitable for time of day clocks in communications equipments and ideal for pick and place assembly.

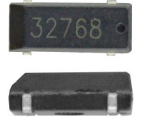
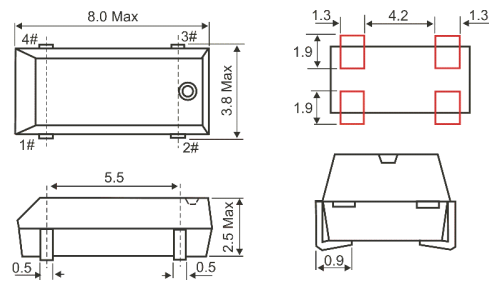
**ELECTRICAL SPECIFICATION**

Frequency Range	30.00 to 200.00kHz
Load Capacitance	6pF or 12.5pF (Typical)
Frequency Tolerance (at 25 °C)	±20 to 50ppM
Operating Temperature Range	-10 °C to +60 °C Standard (or Optional)
Storage Temperature Range	-40 °C to +85 °C
Equivalent Series Resistance (ESR)	40kΩ Maximum
Drive Level	1.0μW
Shunt Capacitance	0.85pF Typical
Aging (at 25 °C)	±3ppM per year
Insulation Resistance (100VDC)	500 MOhm Minimum
Motional Capacitance	2pF Typical
Temperature Coefficient at 25 °C	-0.042ppM (Δ°C) <sup>2</sup> Maximum

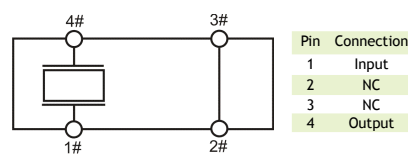
**ENVIRONMENTAL SPECIFICATION**

Conditions		Results
<b>1. Temperature test</b>		
Temperature cycling test	Steps of cycle	1) at -55 °C, 30 minutes 2) at +25 °C, 10-15 min. 3) at +85 °C, 30 minutes 4) at +25 °C, 10-15 min.
	Number of cycles	3 times
	Frequency and wave form of tested products must remain within specifications	
<b>2. Aging test</b>		
Temperature	+85 °C ±20 °C	Deviation of frequency must be less than ±3ppM
Length of test	96 hours	
<b>3. Salt spray test</b>		
Temperature	+35 °C ±2 °C	There should be no stain on surface of products
Length of test	48 hours	
NaCl %	5%	
<b>4. Humidity test</b>		
Temperature	+40 °C ±2 °C	a) Insulation resistance must be 500 MOhms/100 Vac minimum. b) Resistance and wave form must remain within specifications
Relative humidity	90 - 95%	
Length of test	96 hours	

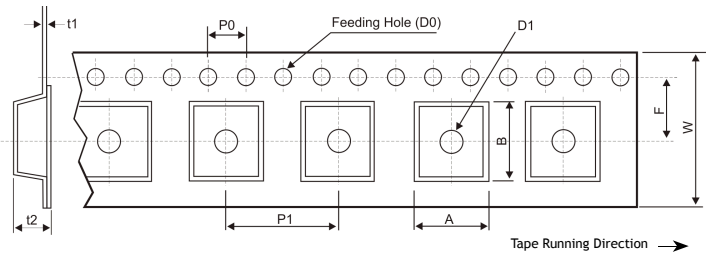
**MECHANICAL DIMENSIONS (all in mm)**



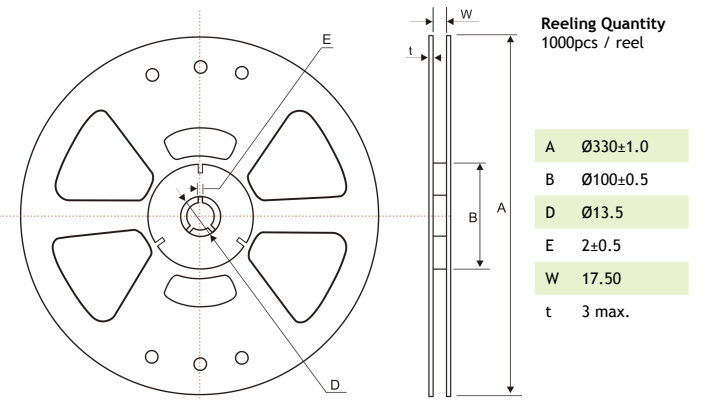
**ELECTRICAL CONNECTIONS**



**TAPE SPECIFICATIONS (all in mm) - Carrier Tape Dimensions**



W	F	P0	P1	D0	D1	t1	t2	A	B
16±0.3	7.5±0.05	4.0±0.1	8.0±0.1	Ø1.5±0.1	Ø1.6±0.25	0.3±0.03	2.7±0.1	8.2±0.1	4.0±0.1



**MECHANICAL SPECIFICATION**

Conditions		Results
<b>1. Lead solderability test</b>		
Dipping in solder(+230 °C±5 °C) for 5 seconds		More than 95% of surface being tested should be coated uniformly with solder
<b>1. Vibration test</b>		
Frequency	10 - 55Hz	Frequency and wave form of tested products must remain within specifications
Amplitude	0.762mm	
Sweep	1.0 minute	
Duration	2 hours	
<b>2. Drop test</b>		
Method of drop	Natural drop	Frequency and wave form of tested products must remain within specifications
Dropping floor	Hard wood board	
Height	30 cm	
Number of drops	3 times	

**PART NUMBERING SYSTEM (Example)**

