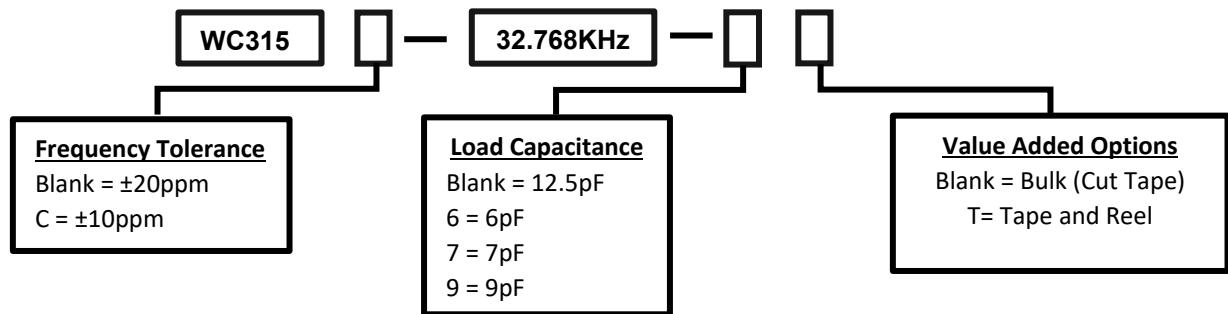


- **SMD Package**
- **Low Profile**
- **RoHS and REACH Compliant**
- **Real Time Clock Source**
- **Metering**
- **Time Reference**

## Electrical Specifications

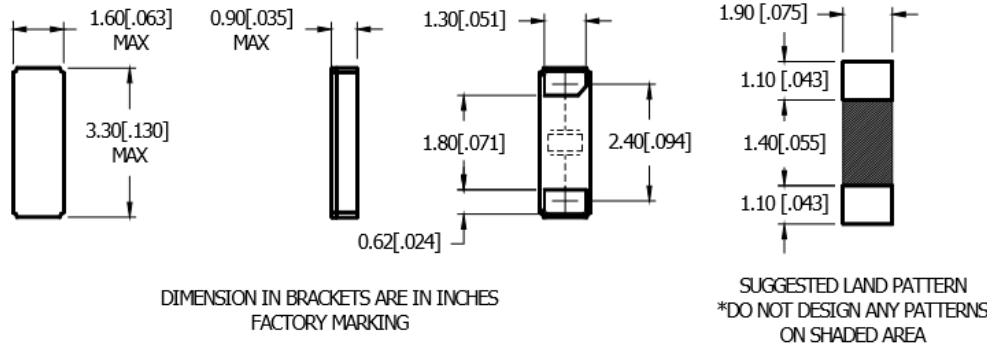
<b>Frequency</b>	32.768kHz
<b>Frequency Tolerance (at 25°C)</b>	±20ppm Max ( Tested at 0.1 µW, See Options)
<b>Load Capacitance</b>	12.5pF (See Options)
<b>Operating Temperature Range</b>	-40°C to +85°C
<b>Storage Temperature Range</b>	-55°C to +125°C
<b>Turnover Temperature</b>	25°C ±5°C
<b>Mode of Operation</b>	Flexural Mode (Tuning Fork)
<b>Frequency Stability (Over Temperature)</b>	-0.040 ppm / (Change in °C) <sup>2</sup> Max
<b>Equivalent Series Resistance (ESR)</b>	70k Ohms Max
<b>Drive Level</b>	0.1 µWatt Typical, 0.5 µWatt Max
<b>Aging (@25°C± 3°C)</b>	±2ppm/ First Year Max
<b>Quality Factor</b>	10000 Min
<b>Shunt Capacitance (Co)</b>	1.6pF Max
<b>Insulation Resistance</b>	500 Mohms Min (at 100Vdc ±15Vdc)

## Part Number Guide



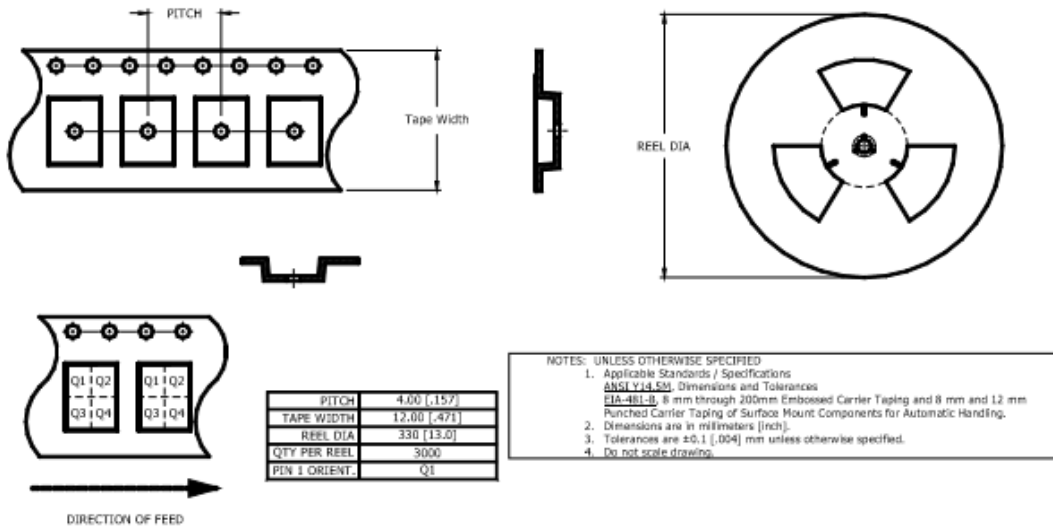
Please consult with MMD sales department for any other parameters or options.

### Mechanical Details

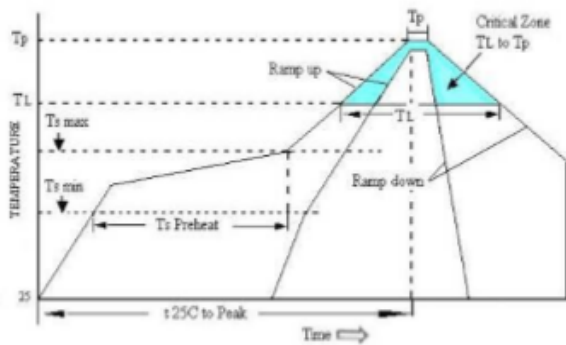


Note: Due to material availability, the outline and finish color of the component may vary. This variation in no way affects the electrical performance of the product.

### Tape & Reel Dimensions



### Pb Free Solder Reflow Profile



Ts max to T <sub>1</sub> (Ramp-up Rate)	3°C / second max
Preheat	
Temperature min (Ts min)	150°C
Temperature typ (Ts typ)	175°C
Temperature max (Ts max)	200°C
Time (Ts)	60 to 180 seconds
Ramp-up Rate (T <sub>1</sub> to Tp)	3°C / second max
Time Maintained Above Temperature (T <sub>1</sub> )	217°C
Time (T <sub>1</sub> )	60 to 150 seconds
Peak Temperature (Tp)	260°C max for 10 seconds
Time within 5°C to Peak Temperature (Tp)	20 to 40 seconds
Ramp-down Rate	6°C / second max
Tune 25°C to Peak Temperature	8 minutes max