

# SMD 3225

## Feature

- Ultra compact and thin. (3.2×2.5×0.6mm typ.)
- Tight Tolerance 10 ppm available.
- Application: Bluetooth; Mobile phone; W-LAN; Office Automation; Audio & Visual.
- Meets the requirements for re-flow profiling using lead-free solder.



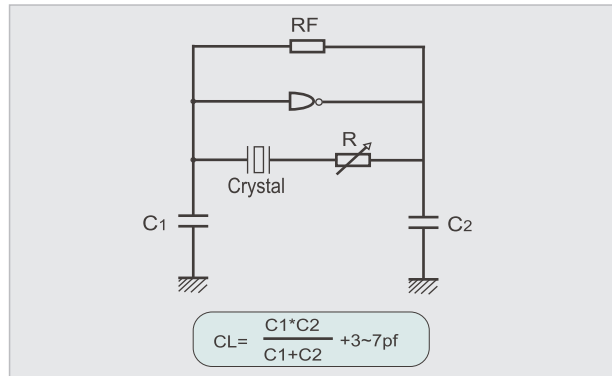
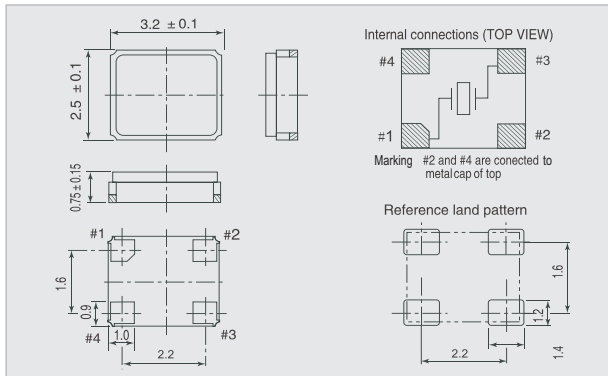
## Specifications

RoHS Compliant REACH Compliant

Item	Model	RFW3 Series	
Frequency Range		12 to 54MHz	
Oscillator Mode		Fundamental	
Frequency Tolerance (25±3°C)		±5PPM~ ±50PPM	
Temperature Characteristics (with reference to +25°C)		±5PPM~ ±100PPM	
Operating Temperature Range		-20 to 70°C (standard), see below "order information"	
Load Capacitance		6pF-32pF, Series	
Storage Temperature Range		-55 to 125°C	
Drive Level		10μW(max. 100μW)	
Equivalent Series Resistance	Frequency Range (MHz)	Equivalent Series Resistance max. [Ω]	
	12 to 13	100	
	13 to 19.5	80	
	19.5 to 27	60	
	27 to 54	50	

The above specifications are standard for this RFW products. Custom-made Spec. such as CL and Temp. Stability are also available. Please contact us with your enquiries.

## Outline Drawing



## Ordering Information

### Part Number Guide

<b>RFW</b> X'TAL	<b>3</b> Package Size (mm)	<b>10</b> Load Capacitance (pF)	<b>B</b> Freq. Tol. @25°C (ppm)	<b>B</b> Frequency Stability (ppm)	<b>C</b> Temp. Range (°C)	<b>1</b> Oscillator Mode	- Dash	<b>Freq.</b> (Mhz)
	<b>3.2*2.5*0.6</b> <b>L=3.2</b> <b>W=2.5</b> <b>H=0.6</b>	<b>XX=xxpF</b>	<b>A:±5</b> <b>B:±10</b> <b>P:±15</b> <b>C:±20</b> <b>D:±25</b> <b>E:±30</b> <b>G:±50</b>	<b>A:±5</b> <b>B:±10</b> <b>P:±15</b> <b>C:±20</b> <b>D:±25</b> <b>E:±30</b> <b>G:±50</b> <b>H:±100</b>	<b>I:-10~+60°C</b> <b>F:-10~+70°C</b> <b>C:-20~+70°C</b> <b>R:-20~+75°C</b> <b>S:-20~+85°C</b> <b>M:-25~+70°C</b> <b>N:-30~+70°C</b> <b>L:-40~+85°C</b> <b>X:-40~+105°C</b> <b>Y:-40~+125°C</b> <b>J:-30~+85°C</b>	<b>1:AT</b> <b>Fundamental</b> <b>3:3rd</b> <b>Overtone</b>		<b>XX.XXXXXX</b>

## Frequency Stability Vs. Temperature Range

Temp.(°C)	Ppm	±5	±10	±15
-10 ~ +60		☺	☺	☺
-20 ~ +70		+	☺	☺
-40 ~ +85		⊘	+	+

☺ Standard    + Available(case by case)    ⊘ Not Available

Example RFW310BBC1-26.000000MHz  
 Crystal unit, RoHS Compliant, 3.2\*2.5mm; CL=10pF; Freq. Tolerance: +/-10ppm;  
 Freq. Stability: +/-10ppm; Operating Temp. Range: -20~70°C; AT Fundamental;  
 Freq. 26.000000MHz.

\*\*Not all combinations of options are available.