

Feature

- Standard footprint. (11.1×4.68×3.51mm typ.)
- Low profile for close PCB stacking.
- Application: Automotive; Bluetooth, Wireless; Computers Modems, Communications;
- Set-top Box, DECT/WDCT.



Specifications

RoHS Compliant

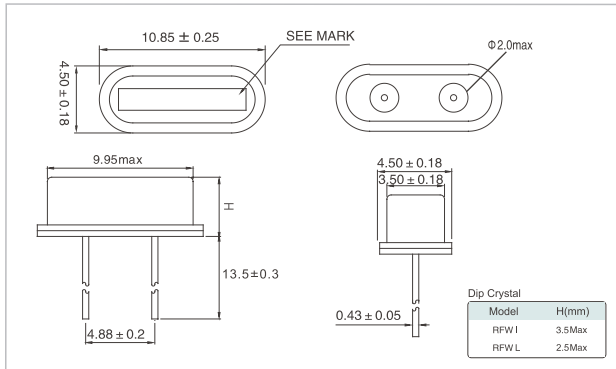


REACH Compliant

Item	Model	RFWI Series			
Frequency Range		3.5 to 80MHz			
Oscillator Mode		Fundamental, 3rd Overtone			
Frequency Tolerance (25±3°C)		±5PPM~±50PPM			
Temperature Characteristics (with reference to +25°C)		±10PPM~±50PPM			
Operating Temperature Range		-20 to 70°C (standard, see below "order information")			
Load Capacitance		6pF~32pF, Series			
Storage Temperature Range		-55 ~ +125°C			
Drive Level		10µW(max. 100µW)			
Equivalent Series Resistance	Frequency Range (MHz)	Equivalent Series Resistance max. [Ω]	Frequency Range (MHz)	Equivalent Series Resistance max. [Ω]	
	3.5 to 4	140	16 to 20	30	
	4 to 5	120	20 to 30	25	
	5 to 7	80	30 to 36	(A1) 25	
	7 to 9	45	30 to 36	(A3) 80	
	9 to 13	40	36 to 80	(A3) 60	
13 to 16	35				

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

RFW X'TAL	I Package Size (mm)	20 Load Capacitance	E Freq. Tol. @25°C (ppm)	E Frequency Stability (ppm)	C Temp. Range (°C)	1 Oscillator Mode	S	T	- Dash	Freq. (Mhz)
	I:3.5mm L:2.5mm I3:3pin	XX=xxpF	A:±5 B:±10 P:±15 C:±20 D:±25 E:±30 G:±50	B:±10 P:±15 C:±20 D:±25 E:±30 G:±50	A: 0~+50°C I: -10~+60°C F: -10~+70°C C: -20~+70°C R: -20~+75°C S: -20~+85°C M: -25~+70°C N: -30~+70°C T: -30~+85°C L: -40~+85°C	1:AT Fundamental 3:3rd Overtone	S:spacer	T: TR		XX.XXXXXX

Frequency Stability Vs. Temperature Range

Temp.(°C)	Ppm	±5	±10	±15	±20	±30	±50
-10 ~ +60		△	○	○	○	○	○
-20 ~ +70		X	△	○	○	○	○
-40 ~ +85		X	X	X	△	○	○

○: Available △: Conditional X: Not available

Example RFWI20EEC1-12.000000MHz
Crystal unit, RoHS Compliant, 11.1*4.68mm; CL=20pF; Freq. Tolerance: +/-30ppm;
Freq. Stability: +/-30ppm; Operating Temp. Range: -20~70°C; No Special; AT
Fundamental; Normal; RoHS Compliant; Freq. 12.000000MHz.
**Not all combinations of options are available.