Raltron Electronics Corporation

Raltron is one of the most recognized and experienced manufacturers of frequency management products in the world providing high performance frequency control solutions that meet and exceed customer expectations in terms of price, quality, applications engineering, and customer support.

Raltron' s complete product portfolio includes:

Crystals and Oscillators http://raltron.me/G1		QR Code or URL linking to the Crystal and Oscillator Product Selection Guide
Antennas http://raltron.me/G2		QR Code or URL linking to the Antenna Solutions Product Selection Guide
RF Cable and Assemblies http://raltron.me/G3		QR Code or URL linking to the RF Cable and Assemblies Product Selection Guide

Please scan any of the above QR codes or go to the URL to download an electronic copy of the short form catalogue. For any additional information please email info@raltron.com.

The Raltron Crystal Resonators Design Kit has been created to give our customers a handy samples inventory of crystal resonators used today in connection with the electronic industry's most popular ICs. We are confident that this kit will be useful every time when new projects are started or when second sources are needed for existing designs.

Thank you for your interest in Raltron!

Yours truly,

Sasha Wolloch
President
Raltron Electronics

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Instructional video on navigating the samples kit on Raltron Youtube Channel.

http://raltron.me/video

Using the Raltron Crystal Resonators Design Kit

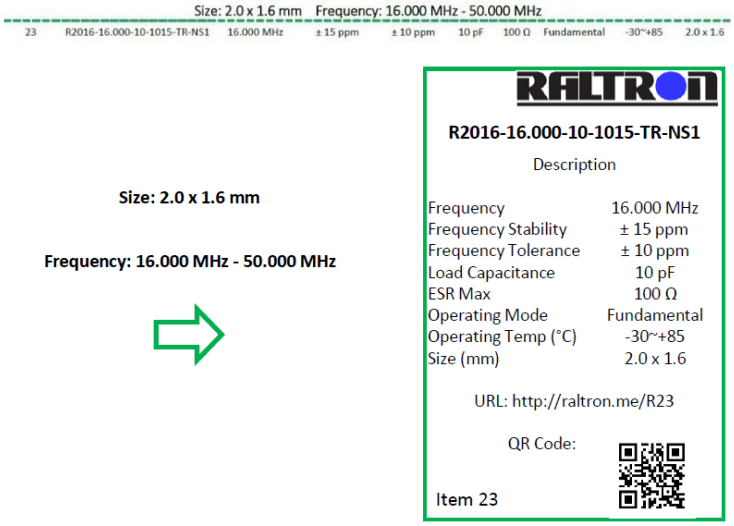
1. Register and log in.

When you receive this kit, the first and the most important thing is to register. You can use this link or scan the QR code below to register and log in.

Log in: http://raltron.me/login

2. What is contained.

This kit covers the most popular crystal frequencies, specifications and package sizes used in the design of electronic devices. Moving from kHz to MHz the kit includes 66 items. The printed card behind each pocket shows the Raltron part number, the part description, the URL, QR code and the item number. The URL or the QR code are used to download the full specification, environmental data, as well as information about inventory available through distribution.



3. Downloading of complete specifications and additional technical and inventory information.

Once you have chosen a device from the development kit, please scan the QR code or use the URL which will link you to the web page with the specification and all the information needed to complete the design. Please remember you need to log in before you scan the QR code or access to the URL for the device.

4. Replenishing used samples.

Having used a device or devices from the development kit you can replenish your kit by scanning the product QR code and clicking on the replenishment link. Raltron or our distribution partner will send you free of charge replacements.

5. Need a different technical specification.

If you need a variation to one of the devices within the development kit e.g., different Load Capacitance, Tolerance, etc. please scan the QR code of the closest device to your requirements where the download page will give you the option to select other parameters which we are happy to sample to you.

6. Request samples of items not available in the kit.

If your required device is not available within the kit, we will be happy to support your sample request. Please email your request to samples@raltron.com. A member of the Raltron team will contact you to ensure we meet your exacting requirements.

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Raltron Crystal Kit Contents

Item	Raltron Part #	Description							
		Frequency	Frequency Stability	Frequency Tolerance	CL	ESR Max	Operating Mode	Operating Temp (°C)	Size (mm)
				Size: 1.2 x 1.0 mm Frequency: 32.768 kHz					
1	RT1210-32.768-9-TR	32.768 kHz	-0.036ppm/°C²	± 20 ppm	9 pF	90 kΩ	Fundamental	-40~+85	1.2 x 1.0
				Size: 1.6 x 1.0 mm Frequency: 32.768 kHz					
2	RT1610-32.768-9-TR	32.768 kHz	-0.045ppm/°C²	± 20 ppm	9 pF	90 kΩ	Fundamental	-40~+85	1.6 x 1.0
3	RT1610-32.768-12.5-TR	32.768 kHz	-0.045ppm/°C²	± 20 ppm	12.5 pF	90 kΩ	Fundamental	-40~+85	1.6 x 1.0
				Size: 2.0 x 1.2 mm Frequency: 32.768 kHz					
4	RT2012-32.768-6-TR	32.768 kHz	-0.034ppm/°C²	± 20 ppm	6 pF	90 kΩ	Fundamental	-40~+85	2.0 x 1.2
5	RT2012-32.768-7-TR	32.768 kHz	-0.034ppm/°C²	± 20 ppm	7 pF	90 kΩ	Fundamental	-40~+85	2.0 x 1.2
6	RT2012-32.768-9-20-EXT-TR	32.768 kHz	-0.04ppm/°C²	± 20 ppm	9 pF	80 kΩ	Fundamental	-40~+85	2.0 x 1.2
7	RT2012-32.768-12.5-EXT-TR	32.768 kHz	-0.034ppm/°C²	± 20 ppm	12.5 pF	90 kΩ	Fundamental	-40~+85	2.0 x 1.2
				Size: 3.2 x 1.5 mm Frequency: 32.768 kHz					
8	RT3215-32.768-6-EXT-TR	32.768 kHz	-0.04ppm/°C²	± 20 ppm	6 pF	65 kΩ	Fundamental	-40~+85	3.2 x 1.5
9	RT3215-32.768-9-TR	32.768 kHz	-0.04ppm/°C²	± 20 ppm	9 pF	70 kΩ	Fundamental	-40~+85	3.2 x 1.5
10	RT3215-32.768-12.5-TR	32.768 kHz	-0.04ppm/°C²	± 20 ppm	12.5 pF	70 kΩ	Fundamental	-40~+85	3.2 x 1.5
				Size: 1.2 x 1.0 mm Frequency: 32.000 MHz - 38.400 MHz					
11	R1210-32.000-5-F-0720-TR	32.000 MHz	± 20 ppm	± 7 ppm	5 pF	150 Ω	Fundamental	-10~+60	1.2 x 1.0
12	R1210-38.400-10-F-2020-TR	38.400 MHz	± 20 ppm	± 20 ppm	10 pF	150 Ω	Fundamental	-10~+60	1.2 x 1.0
				Size: 1.6 x 1.2 mm Frequency: 24.000 MHz - 48.000 MHz					
13	R1612-24.000-8-1020-TR-NS1	24.000 MHz	± 20 ppm	± 10 ppm	8 pF	60 Ω	Fundamental	-30~+105	1.6 x 1.25
14	R1612-25.000-9-F-1010-TR	25.000 MHz	± 10 ppm	± 10 ppm	9 pF	150 Ω	Fundamental	-10~+60	1.6 x 1.25
15	R1612-26.000-10-F-1010-TR-NS1	26.000 MHz	± 10 ppm	± 10 ppm	10 pF	80 Ω	Fundamental	-20~+75	1.6 x 1.25
16	R1612-27.000-8-F-1530-TR	27.000 MHz	± 30 ppm	± 15 ppm	8 pF	150 Ω	Fundamental	-10~+60	1.6 x 1.25
17	R1612-27.120-8-F-3030-EXT-TR	27.120 MHz	± 30 ppm	± 30 ppm	8 pF	150 Ω	Fundamental	-40~+85	1.6 x 1.25
18	R1612-32.000-8-F-1010-TR-NS2	32.000 MHz	± 10 ppm	± 10 ppm	8 pF	80 Ω	Fundamental	-20~+70	1.6 x 1.25
19	R1612-37.400-16-F-1010-TR-NS2	37.400 MHz	± 10 ppm	± 10 ppm	16 pF	80 Ω	Fundamental	-30~+85	1.6 x 1.25
20	R1612-38.400-10-F-1010-TR-NS1	38.400 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-30~+85	1.6 x 1.25
21	R1612-40.000-8-F-2020-TR-NS1	40.000 MHz	± 20 ppm	± 20 ppm	8 pF	100 Ω	Fundamental	-20~+70	1.6 x 1.25
22	R1612-48.000-10-F-1010-TR	48.000 MHz	± 10 ppm	± 10 ppm	10 pF	80 Ω	Fundamental	-20~+70	1.6 x 1.25
				Size: 2.0 x 1.6 mm Frequency: 16.000 MHz - 50.000 MHz					
23	R2016-16.000-10-1015-TR-NS1	16.000 MHz	± 15 ppm	± 10 ppm	10 pF	100 Ω	Fundamental	-30~+85	2.0 x 1.6
24	R2016-20.000-10-3030-EXT-TR	20.000 MHz	± 30 ppm	± 30 ppm	10 pF	200 Ω	Fundamental	-40~+85	2.0 x 1.6
25	R2016-24.000-10-1010-TR-NS1	24.000 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-10~+60	2.0 x 1.6
26	R2016-25.000-20-F-1515-EXT-TR	25.000 MHz	± 15 ppm	± 15 ppm	20 pF	120 Ω	Fundamental	-40~+85	2.0 x 1.6
27	R2016-26.000-10-F-1010-TR	26.000 MHz	± 10 ppm	± 10 ppm	10 pF	100 Ω	Fundamental	-10~+60	2.0 x 1.6

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28	R2016-27.000-8-F-1010-EXT-TR	27.000 MHz	± 10 ppm	± 10 ppm	8 pF	100 Ω	Fundamental	-40~+85	2.0 x 1.6
29	R2016-27.120-10-F-1010-TR-NS4	27.120 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-20~+75	2.0 x 1.6
30	R2016-30.000-8-F-1010-TR-NS1	30.000 MHz	± 10 ppm	± 10 ppm	8 pF	70 Ω	Fundamental	-25~+70	2.0 x 1.6
31	R2016-32.000-10-F-1010-TR-B1B	32.000 MHz	± 10 ppm	± 10 ppm	10 pF	40 Ω	Fundamental	-30~+70	2.0 x 1.6
32	R2016-38.400-10-F-1010-TR	38.400 MHz	± 10 ppm	± 10 ppm	10 pF	180 Ω	Fundamental	-10~+60	2.0 x 1.6
33	R2016-40.000-8-F-1515-TR-NS1	40.000 MHz	± 15 ppm	± 15 ppm	8 pF	60 Ω	Fundamental	-30~+85	2.0 x 1.6
34	R2016-48.000-8-F-1515-EXT-TR	48.000 MHz	± 15 ppm	± 15 ppm	8 pF	60 Ω	Fundamental	-40~+85	2.0 x 1.6
35	R2016-50.000-8-F-1020-TR	50.000 MHz	± 20 ppm	± 10 ppm	8 pF	60 Ω	Fundamental	0~+70	2.0 x 1.6

Size: 2.5 x 2.0 mm Frequency: 12.000 MHz - 40.000 MHz

36	R2520-12.000-10-3030-TR	12.000 MHz	± 30 ppm	± 30 ppm	10 pF	100 Ω	Fundamental	-10~+60	2.5 x 2.0
37	R2520-16.000-10-1020-EXT-TR	16.000 MHz	± 20 ppm	± 10 ppm	10 pF	90 Ω	Fundamental	-40~+85	2.5 x 2.0
38	R2520-20.000-10-1010-TR-NS1	20.000 MHz	± 10 ppm	± 10 ppm	10 pF	70 Ω	Fundamental	-10~+60	2.5 x 2.0
39	R2520-24.000-10-1010-TR-NS4	24.000 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-10~+60	2.5 x 2.0
40	R2520-25.000-10-F-2020-TR-NS3	25.000 MHz	± 20 ppm	± 20 ppm	10 pF	80 Ω	Fundamental	-20~+70	2.5 x 2.0
41	R2520-26.000-10-F-1010-EXT-TR	26.000 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-40~+85	2.5 x 2.0
42	R2520-27.120-10-F-1515-TR-NS1	27.120 MHz	± 15 ppm	± 15 ppm	10 pF	60 Ω	Fundamental	-20~+75	2.5 x 2.0
43	R2520-30.000-10-F-1010-TR-NS3	30.000 MHz	± 10 ppm	± 10 ppm	10 pF	50 Ω	Fundamental	-20~+70	2.5 x 2.0
44	R2520-32.000-10-F-1010-TR-B1B	32.000 MHz	± 10 ppm	± 10 ppm	10 pF	40 Ω	Fundamental	-30~+70	2.5 x 2.0
45	R2520-38.400-10-F-1020-TR	38.400 MHz	± 20 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-10~+60	2.5 x 2.0
46	R2520-40.000-10-F-1010-EXT-TR	40.000 MHz	± 10 ppm	± 10 ppm	10 pF	50 Ω	Fundamental	-40~+85	2.5 x 2.0

Size: 3.2 x 2.5 mm Frequency: 8.000 MHz - 50.000 MHz

47	RH100-8.000-20-3050-EXT-TR	8.000 MHz	± 50 ppm	± 30 ppm	20 pF	800 Ω	Fundamental	-40~+85	3.2 x 2.5
48	RH100-10.000-10-5050-TR	10.000 MHz	± 50 ppm	± 50 ppm	10 pF	100 Ω	Fundamental	-20~+70	3.2 x 2.5
49	RH100-12.000-10-2020-EXT-TR	12.000 MHz	± 20 ppm	± 20 ppm	10 pF	100 Ω	Fundamental	-40~+85	3.2 x 2.5
50	RH100-14.31818-18-3030-EXT-TR	14.31818 MHz	± 30 ppm	± 30 ppm	18 pF	100 Ω	Fundamental	-40~+85	3.2 x 2.5
51	RH100-14.7456-18-TR	14.7456 MHz	± 100 ppm	± 100 ppm	18 pF	80 Ω	Fundamental	-20~+70	3.2 x 2.5
52	RH100-16.000-18-2030-EXT-TR	16.000 MHz	± 30 ppm	± 20 ppm	18 pF	80 Ω	Fundamental	-40~+85	3.2 x 2.5
53	RH100-18.432-18-2030-EXT-TR	18.432 MHz	± 30 ppm	± 20 ppm	18 pF	70 Ω	Fundamental	-40~+85	3.2 x 2.5
54	RH100-20.000-18-2020-TR	20.000 MHz	± 20 ppm	± 20 ppm	18 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
55	RH100-24.000-20-1010-TR	24.000 MHz	± 10 ppm	± 10 ppm	20 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
56	RH100-25.000-18-F-1010-TR	25.000 MHz	± 10 ppm	± 10 ppm	18 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
57	RH100-26.000-10-F-1010-EXT-TR	26.000 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-40~+85	3.2 x 2.5
58	RH100-27.000-12-F-1010-TR	27.000 MHz	± 10 ppm	± 10 ppm	12 pF	100 Ω	Fundamental	-20~+70	3.2 x 2.5
59	RH100-27.120-10-F-3030-TR	27.120 MHz	± 30 ppm	± 30 ppm	10 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
60	RH100-30.000-10-F-1010-TR	30.000 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
61	RH100-32.000-10-F-1010-TR	32.000 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
62	RH100-38.400-10-F-1010-TR	38.400 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
63	RH100-40.000-10-F-1010-TR	40.000 MHz	± 10 ppm	± 10 ppm	10 pF	60 Ω	Fundamental	-20~+70	3.2 x 2.5
64	RH100-48.000-10-F-1015-EXT-TR	48.000 MHz	± 15 ppm	± 10 ppm	10 pF	50 Ω	Fundamental	-40~+85	3.2 x 2.5
65	RH100-50.000-10-F-1015-EXT-TR	50.000 MHz	± 15 ppm	± 10 ppm	10 pF	50 Ω	Fundamental	-40~+85	3.2 x 2.5

Size: 5.0 x 3.2 mm Frequency: 8.000 MHz

66	H130B-8.000-18-3030-EXT-TR	8.000 MHz	± 30 ppm	± 30 ppm	18 pF	100 Ω	Fundamental	-40~+85	5.0 x 3.2

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