

## Crystal filters in metal packages

### Typical application

wireless communication systems, measurement equipment

### Features

- Frequency 5 - 200MHz
- 2 - 12 poles
- Standard and custom filters
- A wide variety of other filter parameters (requirements of the pass- and stop-band, parasites, terminating impedance, intermodulation, group delay, reflection, linearities, etc.)
- We offer standard types of metal cases, filters can be fitted into custom cases too
- RoHS, PB-free



### Examples of standard and custom filters in metal packages

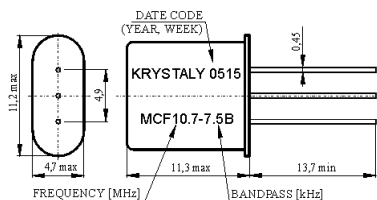
Type	Fo	Poles	Loss	Ripple	Bandw.	Stop band		Impedance	Case
	[MHz]		[dB]	[dB]	[kHz]	[dB]	[kHz]	[Ohm // pF]	
<u>MCF 6.0-3.0/01</u>	6.0	2	3.0	2.0	±1.5	18	±12.5	5500 // -2.0	HC-49/3pin
<u>MCF 8448-8</u>	8.448	2	3.0	0.2	±4.0	25	±25	2000 // 3.0	HC-49/3pin
<u>MCF 10.0-16/08</u>	10.0	8	4.0	1.5	±8.0	60	±20	9000 // -0.5	KV-5
<u>MCF 10.7-7.5A</u>	10.7	2	1.5	0.5	±3.75	20	±18	1800 // 3.5	HC-49/3pin
<u>MCF 10.7-7.5B</u>	10.7	4	2.5	1.0	±3.75	40	±14	1800 // 5.5	2xHC-49/3pin
<u>MCF 10.7-20/08</u>	10.7	8	4.0	1.0	±10	60	±25	50 // 0	KF 17
<u>MCF 10.7-25A</u>	10.7	2	2.0	0.5	±12.5	15	±40	5000 // 0	HC-49/3pin
<u>MCF 10.7-26/10</u>	10.7	10	3.0	1.5	±13	80	±25	910 // 25	KF 17
<u>MCF 18.0-22/8</u>	18.0	8	4.0	1.0	±11	60	±25	50 // 0	KF 17
<u>MCF 20.0-10/02</u>	20.0	2	2.0	1.0	±5.0	3	±7.5	500 // 2.0	UM-1/3pin
<u>MCF 21.4-6.94/8</u>	21.4	8	4.0	1.0	±3.47	55	±6.68	50 // 0	KF 17
<u>MCF 21.4-7.5/06</u>	21.4	6	3.0	2.0	±3.75	45	±8.75	850 // 5.0	KV 2.1
<u>MCF 21.4-15/02</u>	21.4	4	2.5	1.0	±7.5	40	±25	1600 // 2.0	2xUM-1/3pin
<u>MCF 21.4-18/10</u>	21.4	10	3.0	2.0	±9.0	65	±17.5	1300 // 2.0	KV 3
<u>MCF 21.4-20/10</u>	21.4	10	4.0	1.0	±10.05	50	±16	50 // 0	KF 17
<u>MCF 21.4-30/36</u>	21.4	2	1.5	0.5	±15	15	±45	1500 // -0.5	UM-5/3pin
<u>MCF 21.4-46/06</u>	21.4	6	3.0	2.0	±23	70	±130	2700 // -0.5	KV 3
<u>MCF 21.4-46/06K</u>	21.4	6	4.0	2.0	±23	70	±120	50 // 0	KF 13
<u>MCF 21.4-52/02</u>	21.4	2	1.0	1.0	±26	10	±60	3600 // -1.8	HC-49/3pin
<u>MCF 21.65-38/06</u>	21.65	8	4.0	1.5	±19	60	±50	50 // 0	KF 17
<u>MCF 21.855-12A</u>	21.855	2	1.5	0.5	±6.0	20	±25	910 // 3.0	HC-45/3pin
<u>MCF 25.0-7.0/08</u>	25.0	8	5.0	1.0	±3.5	40	±6.5	50 // 0	KF 17
<u>MCF 35.25-17/08</u>	35.25	8	5.0	0.5	±6.5	80	±25	50 // 0	KF 17.5
<u>MCF 35.25-26/10</u>	35.25	10	5.0	1.0	±13	80	±25	50 // 0	KF 17
<u>MCF 35.25-50/07</u>	35.25	6	5.0	2.0	±25	70	±100	50 // 0	KF 13
<u>MCF 42.0-10/02</u>	42.0	2	3.0	1.0	±5.0	25	±40	2200 // -0.2	UM-1/3pin
<u>MCF 45.0-12BS1</u>	45.0	4	3.0	1.0	±6.0	30	±20	500 // 4.0	2xUM-5/3pSMD
<u>MCF 45.0-30/08</u>	45.0	8	3.5	2.0	±15	70	±35	470 // 15	KF 13
<u>MCF 45.0-38/04</u>	45.0	4	3.0	0.0	±19	25	±38	900 // 1.0	2xUM-5/3pin
<u>MCF 45.0-50/04</u>	45.0	4	3.0	0.0	±25	35	±100	2700 // -0.6	2xUM-1/3pSMD
<u>MCF 70.0-8/07</u>	70.0	4	5.0	1.0	±4.0	40	±75	50 // 0	KF 13
<u>MCF 70.0-20/07</u>	70.0	4	3.0	2.0	±10	35	±40	3500 // -0.7	2xUM-1/3pin
<u>MCF 70.455-8/07</u>	70.455	4	4.5	1.0	±4.0	40	±20	50 // 0	KF 13
<u>MCF 70.455-40/07</u>	70.455	4	6.0	1.0	±20	40	±75	50 // 0	KF 13
<u>MCF 75.0-15/04</u>	75.0	4	3.5	0.5	±7.5	25	±20	50 // 0	KF 17
<u>MCF 100.0-15/06</u>	100.0	2	2.0	1.0	±7.5	15	±25	1450 // -1.2	UM-1/3pin

## Metal packages for crystal filters

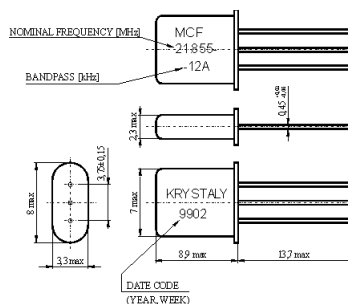
We offer standard types of metal cases, filters can be fitted into custom cases too.

### Examples of standard metal packages

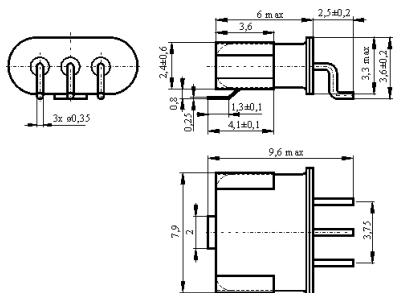
HC-49 case



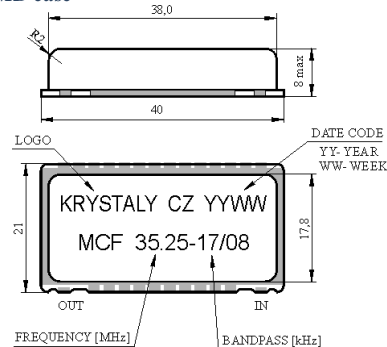
HC-45 case



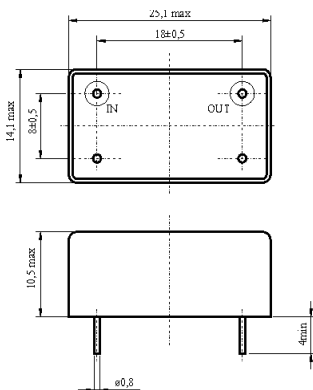
UM-5 case, SMD modification



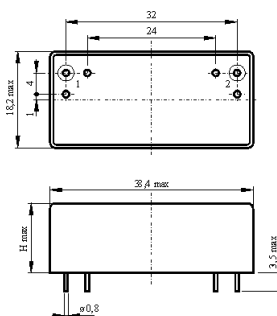
KF-17.5 SMD case



KF-13 case

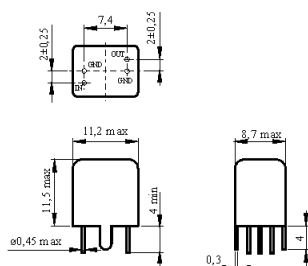


KF-17 case



Type	H	1	2
KF 17	13	OUT	IN
KF 17.1	13	IN	OUT
KF 17.3	10	OUT	IN

GV 2.1 case



GV 3 case

