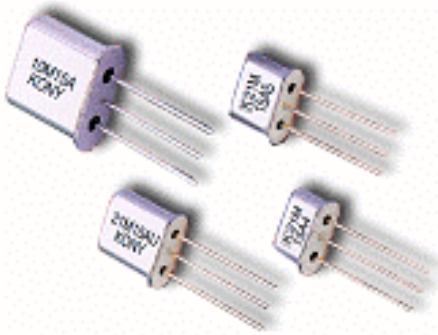


MCF (Monolithic Crystal Filters)



■ Feature

- Compact and Light Weight

■ Specification

1. 10.7MHz Series

Model	Center Frequency (MHz)	Pole	Pass Bandwidth		Stop Bandwidth		Ripple (dB max.)	Insertion Loss (dB max.)	Terminating Impedance (Ω //pF)	Case	Test Circuit
			KHz(min.)	dB	KHz(max.)	dB					
10M08A	10.700	2	± 3.75	3	± 12.5	18	0.5	2.0	1.5K//5.0	49/T	Fig.3
10M08B	10.700	4	± 3.75	3	± 12.5	40	1.0	2.0	1.5K//3.0 (Cc=15pF)	49/T	Fig.4
10L08A	10.695	2	± 3.75	3	± 12.5	18	0.5	2.0	1.5K//5.0	49/T	Fig.3
10L08B	10.695	4	± 3.75	3	± 12.5	40	1.0	2.0	1.5K//3.0 (Cc=15pF)	49/t	Fig.4
10M15A	10.700	2	± 7.50	3	± 25.0	18	0.5	2.0	3.0K//1.0	49/T	Fig.3
10M15B	10.700	4	± 7.50	3	± 25.0	40	1.0	2.0	3.0K//1.0 (Cc=5pF)	49/T	Fig.4
10L15A	10.695	2	± 7.50	3	± 25.0	18	0.5	2.0	3.0K//1.0	49/T	Fig.3
10L15B	10.695	4	± 7.50	3	± 25.0	40	1.0	2.0	3.0K//1.0 (Cc=5pF)	49/T	Fig.4

2. 21.4MHz Series(21.7MHz Available)

Model	Center Frequency (MHz)	Pole	Pass Bandwidth		Stop Bandwidth		Ripple (dB max.)	Insertion Loss (dB max.)	Terminating Impedance (Ω //pF)	Case	Test Circuit
			KHz(min.)	dB	KHz(max.)	dB					
21M08AU	21.400	2	± 3.75	3	± 15.0	18	0.5	2.0	850//6.0	UM-1	Fig.3
21M08AU5	21.400	2	± 3.75	3	± 15.0	18	0.5	2.0	850//6.0	UM-5	Fig.3
21M08BU	21.400	4	± 3.75	3	± 12.5	35	1.0	2.0	900//2.0 (Cc=14pF)	UM-1	Fig.4
21M12AU	21.400	2	± 6.00	3	± 22.0	18	0.5	2.0	910//3.0	UM-1	Fig.3
21M12BU	21.400	4	± 6.00	3	± 20.0	40	1.0	2.0	1.5K//2.0 (Cc=9pF)	UM-1	Fig.4
21M15AU	21.400	2	± 7.50	3	± 25.0	18	0.5	2.0	1.5K//2.5	UM-1	Fig.3
21M15BU	21.400	4	± 7.50	3	± 25.0	40	1.0	2.0	1.5K//1.0 (Cc=6pF)	UM-1	Fig.4
21M15AU5	21.400	2	± 7.50	3	± 25.0	18	0.5	2.0	1.5K//2.5	UM-5	Fig.3



MCF (Monolithic Crystal Filters)

Package Details

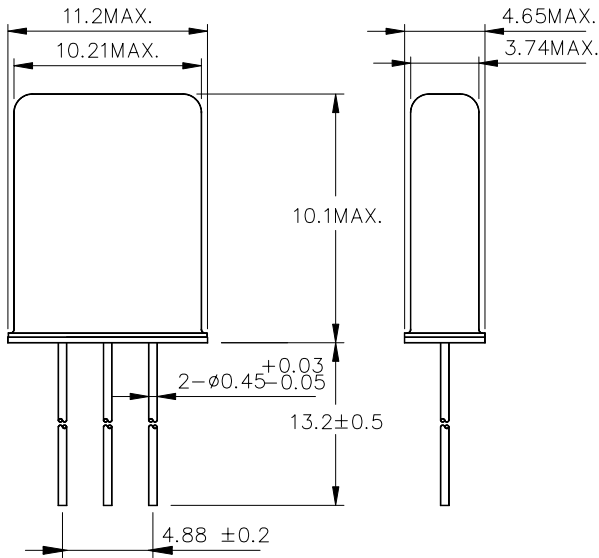


Figure 1 49/T Package

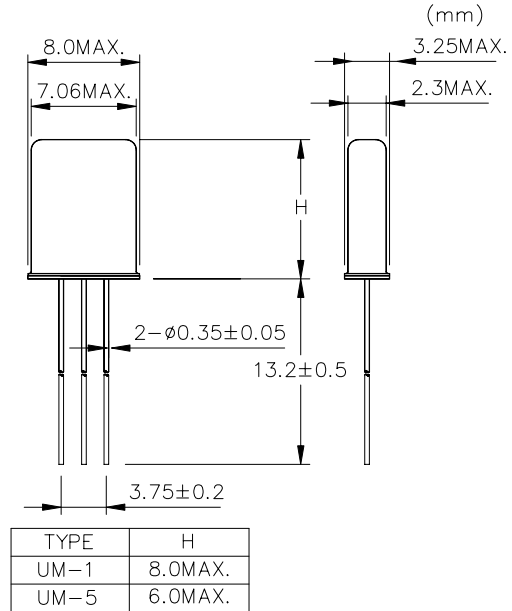


Figure 2 UM Series Package

Test Circuits

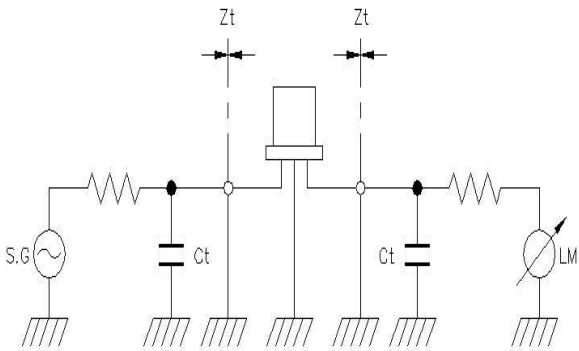


Figure 3

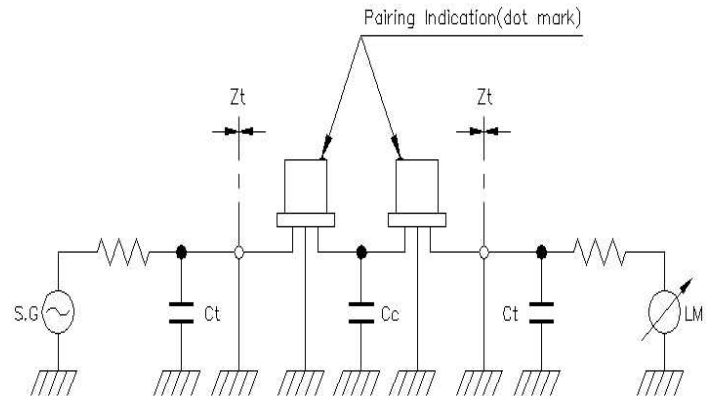
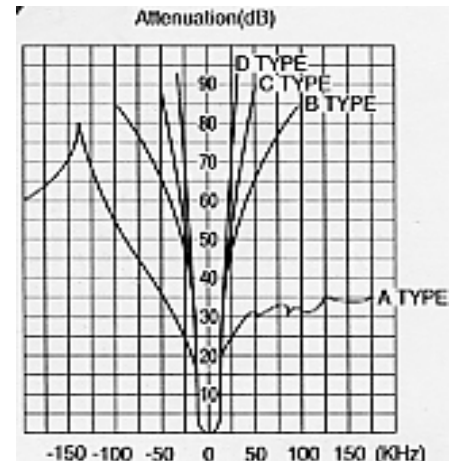
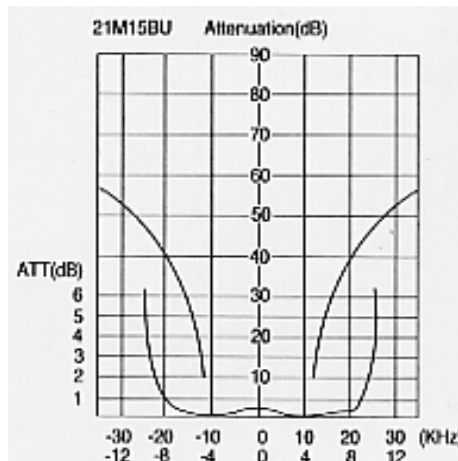
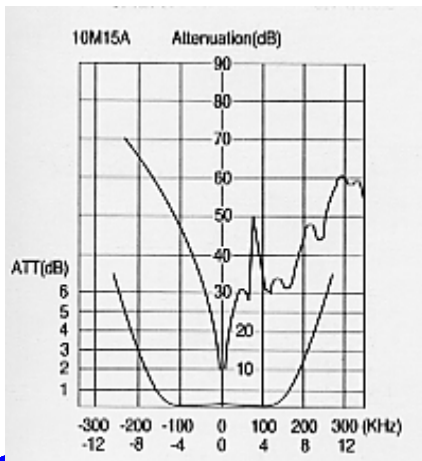


Figure 4

Wave Forms



MCF (Monolithic Crystal Filters)

■ Terms and Definitions

Center Frequency : A frequency given in the specification.

Pass Band Width : Frequency bands(KHz) where attenuation is equal to or below specified figure(dB)
In pass band.

Stop Band Width : Frequency bands(KHz) where attenuation are equal to or bigger specified figure(dB)
In pass band.

Insertion Loss : Loss(dB) defined logarithmic ratio of power transmitted to load before and after
Insertion of filter.

Ripple : Difference(dB) between maximum and minimum attenuation in pass band.

Attenuation Guaranteed :

Attenuation Guaranteed(dB) at specified frequency range.

Spurious : Attenuation(dB) caused by wild response in stop band.

Group Delay Distortion :

Difference(μ sec) between maximum and minimum group delay in pass band.

Terminating Impedance :

Impedance terminating to source side and load side of filter, described by resistance(Ω)
and parallel capacitance(pF).

