

QUARTZ CRYSTAL

CRYSTAL FILTERS (MCF)



Yantai Cn Electronics Co., Ltd

FEATURE

Low insertion loss

High selectivity

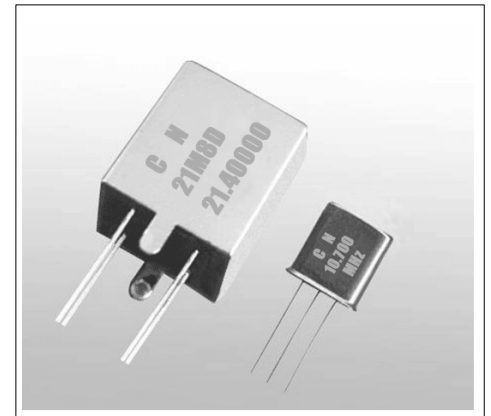
APPLICATIONS

UFH & VHF radio

Pagers

Wireless telemetry

Wireless LAN



ELECTRICAL SPECIFICATIONS

MCF specification											
Model	Nominal Frequency	Channel Spacing	No. of Poles	Pass Band Width		Stop Band width		Ripple	Insertion Loss	Terminal Impedance	Package
	MHz	KHz		dB	KHz	dB	KHz	dB	dB	Kohm//pF	
10M08A	10.7	12.5	2	3	±3.75	20	±18	0.5	2	1.8//5	HC-49/T
10M12A	10.7	20	2	3	±6.00	18	±20	0.5	2	3.0//3	
10M15A	10.7	25	2	3	±7.50	18	±25	0.5	2	2.0//2	
10M30A	10.7	50	2	3	±15.0	18	±50	0.5	2	5.0//1	
10M08B	10.7	12.5	4	3	±3.75	40	±14	1	2.5	1.8//4//12	HC-49/T * 2
10M12B	10.7	20	4	3	±6.00	40	±20	1	2.5	2.8//1.5//7	
10M15B	10.7	25	4	3	±7.50	40	±25	1	2.5	3.0//1//5	
10M30B	10.7	50	4	3	±15.0	40	±50	1	2.5	5.5//1//0	
10M08C	10.7	12.5	6	3	±3.75	85	±12.5	2	3.5	1.6//4	C-1
10M12C	10.7	20	6	3	±6.00	65	±20	2	3	3.0//1.5	
10M15C	10.7	25	6	3	±7.50	65	±25	2	2.5	3.0//2	
10M30C	10.7	50	6	6	±15.0	60	±48	2	2.5	5.5//1	
10M12D	10.7	12.5	8	3	±6.00	90	±20	2	3.5	3.0//1.5	D-1
10M15D	10.7	20	8	3	±7.60	80	±20	2	3.5	3.0//2.0	
10M30D	10.7	25	8	6	±15.0	80	±40	2	3.5	5.5//1	
10M08E	10.7	12.5	3	3	±3.75	90	±10.5	2	5	1.6//4	E-1
10M15E	10.7	25	3	3	±7.50	90	±17.5	2	4	3.0//2	
21M08A	21.4	12.5	2	3	±3.75	18	±14.0	0.5	1.5	0.85//6	UM-1 UM-4 UM-5
21M09A	21.4	12.5	2	3	±4.50	14	±12.0	0.5	1.5	0.85//7	
21M12A	21.4	20	2	3	±6.00	15	±20.0	0.5	1.5	1.2//1.5	
21M15A	21.4	25	2	3	±7.50	18	±25.0	0.5	1.5	1.5//3	
21M20A	21.4	25	2	3	±10.0	10	±25.0	0.5	1.5	1.8//1.5	
21M30A	21.4	50	2	3	±15.0	15	±45.0	0.5	1.5	3.0//0.5	
21P08A	21.6	12.5	2	3	±3.75	18	±14.0	0.5	1.5	0.85//5	UM-1 UM-4 UM-5
21P12A	21.6	20	2	3	±6.00	15	±20.0	0.5	1.5	1.2//2.5	
21P15A	21.6	25	2	3	±7.50	18	±25.0	0.5	1.5	1.5//3	

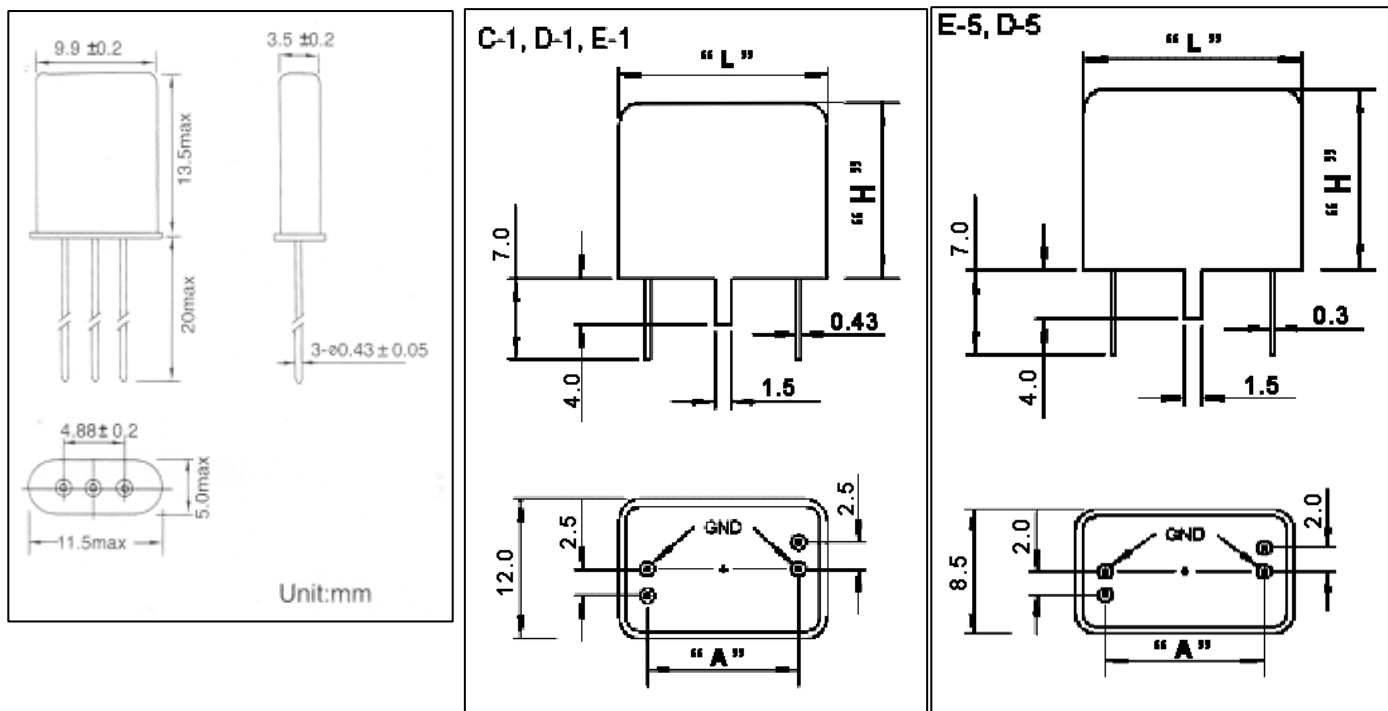
21T07A	21.7	12.5	2	3	±3.75	18	±14.0	0.5	1.5	0.85//5	UM-1 UM-4 UM-5
21T09A	21.7	12.5	2	3	±4.50	14	±12.5	0.5	1.5	1.5//4	
21T12A	21.7	20	2	3	±6.00	15	±20.0	0.5	1.5	1.2//2.5	
21T15A	21.7	25	2	3	±7.50	18	±25.0	0.5	1.5	1.5//3	
21T20A	21.7	25	2	3	±10.0	10	±25.0	0.5	1.5	1.8//1.5	
21T30A	21.7	50	2	3	±15.0	15	±45.0	0.5	1.5	3.0//0.5	
21M07B	21.4	12.5	4	3	±3.75	40	±14.0	1	2	0.85//5//16	UM-1*2 UM-4*2 UM-5*2
21M08B	21.4	12.5	4	3	±4.00	40	±16.0	1	2	1.0//4.0//13.5	
21M12B	21.4	20	4	3	±6.00	40	±20.0	1	2	1.2//2.5//10.5	
21M15B	21.4	25	4	3	±7.50	40	±25.0	1	2	1.5//2//8	
21M30B	21.4	50	4	3	±15.0	40	±50.0	1	2	3.3//0.5//3	
21P07B	21.6	12.5	4	3	±3.75	40	±14.0	1	2	0.85//5//16	UM-1*2 UM-4*2 UM-5*2
21P12B	21.6	20	4	3	±6.00	40	±20.0	1	2	1.2//2.5//10.5	
21P15B	21.6	25	4	3	±7.50	40	±25.0	1	2	1.5//2//8	
21T07B	21.6	50	4	3	±3.75	40	±14.0	1	2	1.2//2.5//10.5	
21P12B	21.6	20	4	3	±6.00	40	±20.0	1	2	1.2//2.5//10.5	
21P15B	21.6	25	4	3	±7.50	40	±25.0	1	2	1.5//2//8	
21T07B	21.7	12.5	4	3	±3.75	40	±14.0	1	2	0.85//5//16	UM-1*2 UM-4*2 UM-5*2
21T12B	21.7	20	4	3	±6.00	40	±20.0	1	2	1.2//2.5//10.5	
21M15B	21.7	25	4	3	±7.50	40	±25.0	1	2	1.5//2//8	
21M30B	21.7	50	4	3	±15.0	40	±50.0	1	2	3.3//0.5//3	UM-1*2 UM-4*2 UM-5*2
21M08C	21.4	12.5	6	3	±3.75	65	±12.5	2	3	0.85//4	
21M12C	21.4	20	6	3	±6.00	65	±20.0	2	2.5	1.2//2	D-5
21M15C	21.4	25	6	6	±7.50	65	±25.0	2	2.5	1.6//2	
21M30C	21.4	20	6	3	±15.0	65	±50.0	2	2.5	2.3//0.5	
21M8D	21.4	12.5	8	3	±3.75	90	±12.5	2	4	0.85//4	
21M12D	21.4	20	8	3	±6.00	90	±20.0	2	3	1.2//2	D-5
21M15D	21.4	25	8	6	±7.50	90	±25.0	2	3.5	1.6//2	
21M30D	21.4	20	8	3	±15.0	80	±60.0	2	3	2.3//0.5	
21M08E	21.4	12.5	10	3	±3.75	90	±10.0	2	5	0.85//4	E-5
21M12E	21.4	20	10	3	±6.00	90	±16.0	2	4	1.2//2	
21M15E	21.4	25	10	6	±7.50	90	±18.0	2	4	1.6//2	

Operating Temperature Range:-20 to +70°C

REMARK: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. PLEASE CONFIRM WITH OUR SALES ENGINEER.



PACKING AND DIMENSIONS



CASE	C-1	D-1	E-1	D-5	E-5
A	9.0mm	13.4mm	17.8mm	7.4mm	9.8mm
L	15.0mm	18.5mm	23.0mm	11.0mm	13.4mm
H	15.0mm	15.0mm	15.0mm	11.0mm	11.0mm

TEST CIRCUITS

