

# Crystal Filter

7D Series UM-1/UM-1MJ Crystal Filter

21.7MHz~45MHz

Package: SMD/DIP



## Features

- Low insertion loss
- High selectivity
- Good inter-modulation and high stability over a wide temperature range
- Excellent guaranteed attenuation
- Application for VHF & UHF radio, Wireless telemetry, Pagers, Wireless LAN, Radio communications, Communications, etc,
- RoHS Compliant /Pb Free



## Standard Specifications

Channel Spacing (KHz)	Model	No. of Poles	Pass Bandwidth		Stop Bandwidth		Ripple dB (max.)	Insertion Loss dB (max.)	Guaranteed Attenuation		Terminating Impedance ohms // pF	Package	
			dB	kHz (min.)	dB	kHz (max.)			dB	kHz		Tandem Set	One Package
12.5	21M7.5A	2	3	±3.75	20	±18	0.5	1.5	35	±300~±1000	850 // 6.0	UM-1	
	21M7.5B	4	3	±3.75	40	±15	1.0	2.5	65	±300~±1000	850 // 5.0	UM-1a pair	
	21M7.5C	6	3	±3.75	45	±8.75	2.0	3.0	65	±12.5~±300	850 // 5.0	UM-13 pcs	S1
	21M7.5D	8	3	±3.75	65	±8.75	2.0	4.0	90	±12.5~±300	850 // 5.0	UM-14 pcs	S2
20.0	21M12A	2	3	±6.0	20	±25	0.5	1.5	35	±300~±1000	1.2K // 3.0	UM-1	
	21M12B	4	3	±6.0	40	±20	1.0	2.5	65	±300~±1000	1.2K // 2.5	UM-1a pair	
	21M12C	6	3	±6.0	45	±15	2.0	3.0	65	±20~±300	1.2K // 2.5	UM-13 pcs	S1
	21M12D	8	3	±6.0	65	±15	2.0	4.0	90	±20~±300	1.2K // 2.5	UM-14 pcs	S2
25.0	21M15A	2	3	±7.5	18	±25	0.5	1.5	35	±300~±1000	1.5K // 2.0	UM-1	
	21M15B	4	3	±7.5	40	±25	1.0	2.5	55	±300~±1000	1.5K // 2.0	UM-1a pair	
	21M15C	6	3	±7.5	45	±18	2.0	3.0	65	±25~±300	1.5K // 2.0	UM-13 pcs	S1
	21M15D	8	3	±7.5	65	±18	2.0	4.0	90	±25~±300	1.5K // 2.0	UM-14 pcs	S2
50.0	21M30A	2	3	±15	15	±45	0.5	1.5	30	±300~±1000	1.5K // 1.0	UM-1	
	21M30B	4	3	±15	40	±50	1.0	2.5	30	±300~±300	2.2K // 0.5	UM-1a pair	
	21M30C	6	3	±15	45	±35	2.0	3.0	60	±45~±300	2.2K // 0.5	UM-13 pcs	S1
	21M30D	8	3	±15	65	±35	2.0	3.5	90	±50~±300	2.2K // 0.5	UM-14 pcs	S2
12.5	45M7.5A	2	3	±3.75	10	±12.5	1.0	2.0	65	±300~±1000	200 // 4.0	UM-1	
	45M7.5B	4	3	±3.75	30	±12.5	1.0	4.0	80	±300~±1000	350 // 6.5	UM-1a pair	
25.0	45M15A	2	3	±7.5	15	±25	1.0	2.0	35	±300~±1000	650 // 3.0	UM-1	
	45M15B	4	3	±7.5	30	±25	1.0	3.0	80	±300~±300	650 // 3.0	UM-1a pair	
50.0	45M30A	2	3	±15	15	±60	1.0	2.5	35	±300~±1000	1.2K // 0	UM-1	
	45M30B	4	3	±15	30	±50	1.0	3.0	80	±300~±1000	1.2K // 0.7	UM-1a pair	

## Dimensions

[mm]

### UM-1 Series

### 4 Pole M.C.F. (Paired package, Tandem set)

Color dots for pair orientation match

User to provide Cc

### UM-1MJ Series

### (S-1), (S-2)---One Package Type

### Pin Connection

Pin 1: Output  
Pin 2: Ground  
Pin 3: Ground  
Pin 4: Input

	L	P
L-1	11.0	7.4
L-2	13.4	9.8