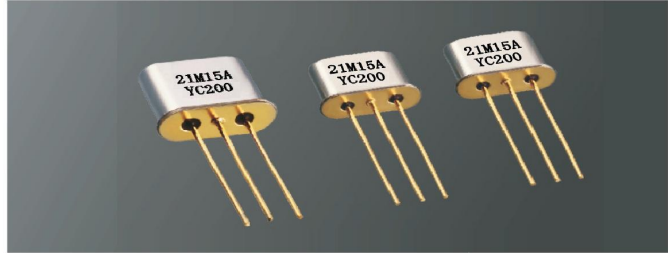




## Features

MCF 21/45 MHz Series  
Seam Type  
Small Size, Light Weight  
Resistance Weld Hermetic Seal  
Wide Frequency Range



## Electrical Specification

Fundamental Vibration Mode MCF(36 kinds) : 10.695MHz / 10.700MHz / 10.695MHz

No	Part Number	Nominal Frequency		Pass Band Width		Stop Band Width		Ripple	Insertion Loss (dB)	Terminal Impedance Rt/Ct/Cc (KΩ//pF//pF)	Package (DIP or SMD Jacket)
		(MHz)	Poles	(dB)	(KHz)	(dB)	(KHz)				
<b>10.695 MHz Monolithic Crystal Filter (Fundamental)</b>											
1	JF10L07A	10.695	2	3	±3.75	20	±18.0	0.5	2	1.5//5.0	HC-49U, HC-49TorSMDJacket
2	JF10L07B	10.695	4	3	±3.75	40	±14.0	1	2.5	1.5//5.0//Cc	HC-49Ux2, HC-49Tx2orSMDJacket
3	JF10L08B	10.695	4	3	±4.00	40	±15.0	1	2.5	1.5//6.0//Cc	HC-49U, HC-49TorSMDJacket
4	JF10L12A	10.695	2	3	±6.00	18	±23.0	0.5	2	2.5//2.5	HC-49Ux2, HC-49Tx2orSMDJacket
5	JF10L12B	10.695	4	3	±6.00	40	±20.0	1	2.5	1.5//2.0//Cc	HC-49U, HC-49TorSMDJacket
6	JF10L15A	10.695	2	3	±7.50	18	±25.0	0.5	2	3.0//2.0	HC-49Ux2, HC-49Tx2orSMDJacket
7	JF10L15B	10.695	4	3	±7.50	40	±25.0	1	2.5	3.0//2.0//Cc	HC-49U, HC-49TorSMDJacket
8	JF10L20A	10.695	2	3	±10.0	18	±34.0	0.5	2	3.0//1.5	HC-49Ux2, HC-49Tx2orSMDJacket
9	JF10L20B	10.695	4	3	±10.0	40	±34.0	1	2.5	3.9//0//Cc	HC-49U, HC-49TorSMDJacket
10	JF10L30A	10.695	2	3	±15.0	15	±50.0	1	2	3.9//0	HC-49Ux2, HC-49Tx2orSMDJacket
11	JF10L30B	10.695	4	3	±15.0	25	±40.0	0.5	2	5.5//~1//Cc	HC-49U, HC-49TorSMDJacket
12	JF10L14A	10.695	2	3	±6.50	18	±25.0	0.5	1.5	2.4//~1.9	HC-49Ux2, HC-49Tx2orSMDJacket
<b>10.700 MHz Monolithic Crystal Filter (Fundamental)</b>											
1	JF10M07A	10.7	2	3	±3.75	20	±18.0	0.5	2	1.5//5.0	HC-49U, HC-49TorSMDJacket
2	JF10M07B	10.7	4	3	±3.75	40	±14.0	1	2.5	1.5//5.0//Cc	HC-49Ux2, HC-49Tx2orSMDJacket
3	JF10M08B	10.7	4	3	±4.00	40	±15.0	1	2.5	1.5//6.0//Cc	HC-49U, HC-49TorSMDJacket
4	JF10M12A	10.7	2	3	±6.00	18	±23.0	0.5	2	2.5//2.5	HC-49Ux2, HC-49Tx2orSMDJacket
5	JF10M12B	10.7	4	3	±6.00	40	±20.0	1	2.5	1.5//2.0//Cc	HC-49U, HC-49TorSMDJacket
6	JF10M15A	10.7	2	3	±7.50	18	±25.0	0.5	2	3.0//2.0	HC-49Ux2, HC-49Tx2orSMDJacket
7	JF10M15B	10.7	4	3	±7.50	40	±25.0	1	2.5	3.0//2.0//Cc	HC-49U, HC-49TorSMDJacket
8	JF10M20A	10.7	2	3	±10.0	18	±34.0	0.5	2	3.0//1.5	HC-49Ux2, HC-49Tx2orSMDJacket
9	JF10M20B	10.7	4	3	±10.0	40	±34.0	1	2.5	3.9//0//Cc	HC-49U, HC-49TorSMDJacket
10	JF10M30A	10.7	2	3	±15.0	15	±50.0	1	2	3.9//0	HC-49Ux2, HC-49Tx2orSMDJacket
11	JF10M30B	10.7	4	3	±15.0	25	±40.0	0.5	2	5.5//~1//Cc	HC-49U, HC-49TorSMDJacket
12	JF10M14A	10.7	2	3	±6.50	18	±25.0	0.5	1.5	2.4//~1.9	HC-49Ux2, HC-49Tx2orSMDJacket
<b>10.710 MHz Monolithic Crystal Filter (Fundamental)</b>											
1	JF10N07A	10.71	2	3	±3.75	20	±18.0	0.5	2	1.5//5.0	HC-49U, HC-49TorSMDJacket
2	JF10N07B	10.71	4	3	±3.75	40	±14.0	1	2.5	1.5//5.0//Cc	HC-49Ux2, HC-49Tx2orSMDJacket
3	JF10N08B	10.71	4	3	±4.00	40	±15.0	1	2.5	1.5//6.0//Cc	HC-49U, HC-49TorSMDJacket
4	JF10N12A	10.71	2	3	±6.00	18	±23.0	0.5	2	2.5//2.5	HC-49Ux2, HC-49Tx2orSMDJacket
5	JF10N12B	10.71	4	3	±6.00	40	±20.0	1	2.5	1.5//2.0//Cc	HC-49U, HC-49TorSMDJacket

# Crystal Filter

## 10.710 MHz Monolithic Crystal Filter (Fundamental)

6	JF10N15A	10.71	2	3	±7.50	18	±25.0	0.5	2	3.0//2.0	HC-49Ux2, HC-49Tx2orSMDJacket
7	JF10N15B	10.71	4	3	±7.50	40	±25.0	1	2.5	3.0//2.0//Cc	HC-49U, HC-49TorSMDJacket
8	JF10N20A	10.71	2	3	±10.0	18	±34.0	0.5	2	3.0//1.5	HC-49Ux2, HC-49Tx2orSMDJacket
9	JF10N20B	10.71	4	3	±10.0	40	±34.0	1	2.5	3.9//0//Cc	HC-49U, HC-49TorSMDJacket
10	JF10N30A	10.71	2	3	±15.0	15	±50.0	1	2	3.9//0	HC-49Ux2, HC-49Tx2orSMDJacket
11	JF10N30B	10.71	4	3	±15.0	25	±40.0	0.5	2	5.5//-1//Cc	HC-49U, HC-49TorSMDJacket
12	JF10N14A	10.71	2	3	±6.50	18	±25.0	0.5	1.5	2.4//-1.9	HC-49Ux2, HC-49Tx2orSMDJacket

## ■ Electrical Specification

Fundamental Vibration Mode MCF(37kinds):17.900MHz, 21.400MHz, 21.450MHz, 26.050MHz, 29.250MHz

No	Part Number	Nominal Frequency		Pass Band Width		Stop Band Width		Ripple (dB)	Insertion Loss (dB)	Terminal Impedance Rt/Ct/Cc (KΩ//pF//pF)	Package (DIPorSMDJacket)
		(MHz)	Poles	(dB)	(KHz)	(dB)	(KHz)				

### 17.900 MHz Monolithic Crystal Filter (Fundamental)

1	JF17M07A	17.9	2	3	±3.75	20	±18.0	0.5	2	1.5//5.0	UM-1, UM-5orSMDJacket
2	JF17M07B	17.9	4	3	±3.75	40	±14.0	1	2.5	1.5//5.0//Cc	UM-1x2, UM-5x2orSMDJacket
3	JF17M08B	17.9	4	3	±4.00	40	±15.0	1	2.5	1.5//6.0//Cc	UM-1, UM-5orSMDJacket
4	JF17M12A	17.9	2	3	±6.00	18	±23.0	0.5	2	2.5//2.5	UM-1x2, UM-5x2orSMDJacket
5	JF17M12B	17.9	4	3	±6.00	40	±20.0	1	2.5	1.5//2.0//Cc	UM-1, UM-5orSMDJacket
6	JF17M15A	17.9	2	3	±7.50	18	±25.0	0.5	2	3.0//2.0	UM-1x2, UM-5x2orSMDJacket
7	JF17M15B	17.9	4	3	±7.50	40	±25.0	1	2.5	3.0//2.0//Cc	UM-1, UM-5orSMDJacket
8	JF17M20A	17.9	2	3	±10.0	18	±34.0	0.5	2	3.0//1.5	UM-1x2, UM-5x2orSMDJacket
9	JF17M20B	17.9	4	3	±10.0	40	±34.0	1	2.5	3.9//0//Cc	UM-1, UM-5orSMDJacket
10	JF17M30A	17.9	2	3	±15.0	15	±50.0	1	2	3.9//0	UM-1x2, UM-5x2orSMDJacket
11	JF17M30B	17.9	4	3	±15.0	25	±40.0	0.5	2	5.5//-1//Cc	UM-1, UM-5orSMDJacket
12	JF17M14A	17.9	2	3	±6.50	18	±25.0	0.5	1.5	2.4//-1.9	UM-1x2, UM-5x2orSMDJacket

### 21.400 MHz Monolithic Crystal Filter (Fundamental)

1	JF21M07A	21.4	2	3	±3.75	18	±14.0	0.5	2	0.85//5.0	UM-1, UM-5orSMDJacket
2	JF21M07B	21.4	4	3	±3.75	40	±14.0	1	2.5	0.85//5.0//Cc	UM-1x2, UM-5x2orSMDJacket
3	JF21M12A	21.4	2	3	±6.00	18	±23.0	0.5	2	1.2//2.5	UM-1, UM-5orSMDJacket
4	JF21M12B	21.4	4	3	±6.00	40	±20.0	1	2.5	1.2//2.5//Cc	UM-1x2, UM-5x2orSMDJacket
5	JF21M15A	21.4	2	3	±7.50	18	±25.0	0.5	1.5	1.5//2.0	UM-1, UM-5orSMDJacket
6	JF21M15B	21.4	4	3	±7.50	40	±25.0	1	2	1.5//2.0//Cc	UM-1x2, UM-5x2orSMDJacket
7	JF21M20A	21.4	2	3	±10.0	18	±34.0	0.5	1.5	2.2//1.0	UM-1, UM-5orSMDJacket
8	JF21M20B	21.4	4	3	±10.0	40	±34.0	1	2	2.2//1.0//Cc	UM-1x2, UM-5x2orSMDJacket
9	JF21M30A	21.4	2	3	±15.0	15	±50.0	0.5	1.5	3.0//0	UM-1, UM-5orSMDJacket
10	JF21M30B	21.4	4	3	±15.0	30	±45.0	1	2	3.0//0//Cc	UM-1x2, UM-5x2orSMDJacket

### 21.450 MHz Monolithic Crystal Filter (Fundamental)

1	JF21N15A	21.45	2	3	±7.50	18	±25.0	0.5	2	1.5//2.0	UM-1, UM-5orSMDJacket
2	JF21N15A	21.45	2	3	±7.50	18	±25.0	0.5	2	1.6//1.0	UM-1, UM-5orSMDJacket
3	JF21N20A	21.45	2	3	±10.0	13	±43.0	1	2	1.5//2.0	UM-1, UM-5orSMDJacket

### 21.700 MHz Monolithic Crystal Filter (Fundamental)

1	JF21T07A	21.7	2	3	±3.75	18	±14.0	0.5	2	0.85//5.0	UM-1, UM-5orSMDJacket
2	JF21T07B	21.7	4	3	±3.75	40	±14.0	1	2.5	0.85//5.0//Cc	UM-1x2, UM-5x2orSMDJacket
3	JF21T12A	21.7	2	3	±6.00	18	±23.0	0.5	2	1.2//2.5	UM-1, UM-5orSMDJacket
4	JF21T12B	21.7	4	3	±6.00	40	±20.0	1	2.5	1.2//2.5//Cc	UM-1x2, UM-5x2orSMDJacket



### 21.700 MHz Monolithic Crystal Filter (Fundamental)

5	JF21T15A	21.7	2	3	±7.50	18	±25.0	0.5	1.5	1.5//2.0	UM-1, UM-5orSMDJacket
6	JF21T15B	21.7	4	3	±7.50	40	±25.0	1	2	1.5//2.0//Cc	UM-1x2, UM-5x2orSMDJacket
7	JF21T20A	21.7	2	3	±10.0	18	±34.0	0.5	1.5	2.2//1.0	UM-1, UM-5orSMDJacket
8	JF21T20B	21.7	4	3	±10.0	40	±34.0	1	2	2.2//1.0//Cc	UM-1x2, UM-5x2orSMDJacket
9	JF21T30A	21.7	2	3	±15.0	15	±50.0	0.5	1.5	3.0//0	UM-1, UM-5orSMDJacket
10	JF21T30B	21.7	4	3	±15.0	30	±45.0	1	2	3.0//0//Cc	UM-1x2, UM-5x2orSMDJacket

### 26.050 MHz Monolithic Crystal Filter (Fundamental)

1	JF26M17A	26.05	2	3	±8.50	14	±25.0	0.5	2.5	1.1//1.5	UM-1, UM-5orSMDJacket
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### 29.250 MHz Monolithic Crystal Filter (Fundamental)

1	JF29M20A	29.25	2	3	±10.0	10	±24.5	0.5	2	1.6//1.5	UM-1, UM-5orSMDJacket
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## Electrical Specification

Fundamental MCF(50kinds): 44.9625MHz, 45.000MHz, 45.0375MHz, 45.1000MHz, 45.3000MHz

No	Part Number	Nominal Frequency		Pass Band Width		Stop Band Width		Ripple	Insertion Loss	Terminal Impedance	Package
		(MHz)	Poles	(dB)	(KHz)	(dB)	(KHz)				

### 44.9625 MHz Monolithic Crystal Filter (Fundamental)

1	JF45L07A	44.9625	2	3	±3.75	10	±12.5	1	2.5	0.30//10.0	UM-1, UM-5orSMDJacket
2	JF45L07B	44.9625	4	3	±3.75	30	±12.5	1	4	0.30//8.0//Cc	UM-1x2, UM-5x2orSMDJacket
3	JF45L12A	44.9625	2	3	±6.0	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
4	JF45L12B	44.9625	4	3	±6.0	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
5	JF45L15A	44.9625	2	3	±7.5	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
6	JF45L15B	44.9625	4	3	±7.5	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
7	JF45L20A	44.9625	2	3	±10.0	15	±34.0	1	2	0.70//2.5	UM-1, UM-5orSMDJacket
8	JF45L20B	44.9625	4	3	±10.0	40	±48.0	1	3	0.70//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
9	JF45L30A	44.9625	2	3	±15.0	15	±50.0	1	2	0.80//1.5	UM-1, UM-5orSMDJacket
10	JF45L30B	44.9625	4	3	±15.0	40	±60.0	1	3	0.80//1.0//Cc	UM-1x2, UM-5x2orSMDJacket

### 45 MHz Monolithic Crystal Filter (Fundamental)

1	JF45M07A	45	2	3	±3.75	10	±12.5	1	2.5	0.30//10.0	UM-1, UM-5orSMDJacket
2	JF45M07B	45	4	3	±3.75	30	±12.5	1	4	0.30//8.0//Cc	UM-1x2, UM-5x2orSMDJacket
3	JF45M12A	45	2	3	±6.0	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
4	JF45M12B	45	4	3	±6.0	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
5	JF45M15A	45	2	3	±7.5	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
6	JF45M15B	45	4	3	±7.5	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
7	JF45M20A	45	2	3	±10.0	15	±34.0	1	2	0.70//2.5	UM-1, UM-5orSMDJacket
8	JF45M20B	45	4	3	±10.0	40	±48.0	1	3	0.70//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
9	JF45M30A	45	2	3	±15.0	15	±50.0	1	2	0.80//1.5	UM-1, UM-5orSMDJacket
10	JF45M30B	45	4	3	±15.0	40	±60.0	1	3	0.80//1.0//Cc	UM-1x2, UM-5x2orSMDJacket

### 45.0375 MHz Monolithic Crystal Filter (Fundamental)

1	JF45N07A	45.0375	2	3	±3.75	10	±12.5	1	2.5	0.30//10.0	UM-1, UM-5orSMDJacket
2	JF45N07B	45.0375	4	3	±3.75	30	±12.5	1	4	0.30//8.0//Cc	UM-1x2, UM-5x2orSMDJacket
3	JF45N12A	45.0375	2	3	±6.0	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
4	JF45N12B	45.0375	4	3	±6.0	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
5	JF45N15A	45.0375	2	3	±7.5	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
6	JF45N15B	45.0375	4	3	±7.5	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
7	JF45N20A	45.0375	2	3	±10.0	15	±34.0	1	2	0.70//2.5	UM-1, UM-5orSMDJacket
8	JF45N20B	45.0375	4	3	±10.0	40	±48.0	1	3	0.70//1.5//Cc	UM-1x2, UM-5x2orSMDJacket

# Crystal Filter

## 45.0375 MHz Monolithic Crystal Filter (Fundamental)

9	JF45N30A	45.0375	2	3	±15.0	15	±50.0	1	2	0.80//1.5	UM-1, UM-5orSMDJacket
10	JF45N30B	45.0375	4	3	±15.0	40	±60.0	1	3	0.80//1.0//Cc	UM-1x2, UM-5x2orSMDJacket

## 45.1 MHz Monolithic Crystal Filter (Fundamental)

1	JF45P07A	45.1	2	3	±3.75	10	±12.5	1	2.5	0.30//10.0	UM-1, UM-5orSMDJacket
2	JF45P07B	45.1	4	3	±3.75	30	±12.5	1	4	0.30//8.0//Cc	UM-1x2, UM-5x2orSMDJacket
3	JF45P12A	45.1	2	3	±6.0	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
4	JF45P12B	45.1	4	3	±6.0	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
5	JF45P15A	45.1	2	3	±7.5	15	±25.0	1	2	0.65//4.5	UM-1, UM-5orSMDJacket
6	JF45P15B	45.1	4	3	±7.5	30	±25.0	1	3	0.65//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
7	JF45P20A	45.1	2	3	±10.0	15	±34.0	1	2	0.70//2.5	UM-1, UM-5orSMDJacket
8	JF45P20B	45.1	4	3	±10.0	40	±48.0	1	3	0.70//1.5//Cc	UM-1x2, UM-5x2orSMDJacket
9	JF45P30A	45.1	2	3	±15.0	15	±50.0	1	2	0.80//1.5	UM-1, UM-5orSMDJacket
10	JF45P30B	45.1	4	3	±15.0	40	±60.0	1	3	0.80//1.0//Cc	UM-1x2, UM-5x2orSMDJacket

## 45.300 MHz Monolithic Crystal Filter (Fundamental)

1	JF45Q07A	45.3	2	3	±3.75	10	±12.5	1	2.5		UM-1, UM-5orSMDJacket
2	JF45Q07B	45.3	4	3	±3.75	30	±12.5	1	4		UM-1x2, UM-5x2orSMDJacket
3	JF45Q12A	45.3	2	3	±6.0	15	±25.0	1	2		UM-1, UM-5orSMDJacket
4	JF45Q12B	45.3	4	3	±6.0	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
5	JF45Q15A	45.3	2	3	±7.5	15	±25.0	1	2		UM-1, UM-5orSMDJacket
6	JF45Q15B	45.3	4	3	±7.5	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
7	JF45Q20A	45.3	2	3	±10.0	15	±34.0	1	2		UM-1, UM-5orSMDJacket
8	JF45Q20B	45.3	4	3	±10.0	40	±48.0	1	3		UM-1x2, UM-5x2orSMDJacket
9	JF45Q30A	45.3	2	3	±15.0	15	±50.0	1	2		UM-1, UM-5orSMDJacket
10	JF45Q30B	45.3	4	3	±15.0	40	±60.0	1	3		UM-1x2, UM-5x2orSMDJacket

## ■ Electrical Specification

### 3rd-Overtone MCF(50 kinds) : 44.9625MHz, 45.000MHz, 45.0375MHz, 45.1000MHz, 45.3000MHz

No	Part Number	Nominal Frequency (MHz)	Pass Band		Stop Band		Ripple (Max) (dB)	I/L (MAX) (dB)	Terminal Impedance (KΩ//pF//pF)	Package (DIPorSMDJacket)
			Poles	Width (dB)	Width (KHz)	(KHz)				

### 44.9625 MHz Monolithic Crystal Filter (3<sup>rd</sup>-Overtone)

1	JF45R07A	44.9625	2	3	±3.75	10	±12.5	1	2.5		UM-1, UM-5orSMDJacket
2	JF45R07B	44.9625	4	3	±3.75	30	±12.5	1	4		UM-1x2, UM-5x2orSMDJacket
3	JF45R12A	44.9625	2	3	±6.0	15	±25.0	1	2		UM-1, UM-5orSMDJacket
4	JF45R12B	44.9625	4	3	±6.0	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
5	JF45R15A	44.9625	2	3	±7.5	15	±25.0	1	2		UM-1, UM-5orSMDJacket
6	JF45R15B	44.9625	4	3	±7.5	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
7	JF45R20A	44.9625	2	3	±10.0	15	±34.0	1	2		UM-1, UM-5orSMDJacket
8	JF45R20B	44.9625	4	3	±10.0	40	±48.0	1	3		UM-1x2, UM-5x2orSMDJacket
9	JF45R30A	44.9625	2	3	±15.0	15	±50.0	1	2		UM-1, UM-5orSMDJacket
10	JF45R30B	44.9625	4	3	±15.0	40	±60.0	1	3		UM-1x2, UM-5x2orSMDJacket

### 45MHz Monolithic Crystal Filter(3<sup>rd</sup>-Overtone)

1	JF45S07A	45	2	3	±3.75	10	±12.5	1	2.5		UM-1, UM-5orSMDJacket
2	JF45S07B	45	4	3	±3.75	30	±12.5	1	4		UM-1x2, UM-5x2orSMDJacket
3	JF45S12A	45	2	3	±6.0	15	±25.0	1	2		UM-1, UM-5orSMDJacket
4	JF45S12B	45	4	3	±6.0	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
5	JF45S15A	45	2	3	±7.5	15	±25.0	1	2		UM-1, UM-5orSMDJacket
6	JF45S15B	45	4	3	±7.5	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket



**3rd-Overtone MCF(50 kinds) : 44.9625MHz, 45.000MHz, 45.0375MHz, 45.1000MHz, 45.3000MHz**

No	Part Number	Nominal Frequency	Poles	Pass Band Width		Stop Band Width		Ripple (Max)	I/L (MAX)	Terminal Impedance	Package (DIPorSMDJacket)
		(MHz)		(dB)	(KHz)	(dB)	(KHz)	(dB)	(dB)	(KΩ//pF//pF)	

**45MHz Monolithic Crystal Filter(3<sup>rd</sup>-Overtone)**

7	JF45S20A	45	2	3	±10.0	15	±34.0	1	2		UM-1, UM-5orSMDJacket
8	JF45S20B	45	4	3	±10.0	40	±48.0	1	3		UM-1x2, UM-5x2orSMDJacket
9	JF45S30A	45	2	3	±15.0	15	±50.0	1	2		UM-1, UM-5orSMDJacket
10	JF45S30B	45	4	3	±15.0	40	±60.0	1	3		UM-1x2, UM-5x2orSMDJacket

**45.0375 MHz Monolithic Crystal Filter (3<sup>rd</sup>-Overtone)**

1	JF45T07A	45.0375	2	3	±3.75	10	±12.5	1	2.5		UM-1, UM-5orSMDJacket
2	JF45T07B	45.0375	4	3	±3.75	30	±12.5	1	4		UM-1x2, UM-5x2orSMDJacket
3	JF45T12A	45.0375	2	3	±6.0	15	±25.0	1	2		UM-1, UM-5orSMDJacket
4	JF45T12B	45.0375	4	3	±6.0	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
5	JF45T15A	45.0375	2	3	±7.5	15	±25.0	1	2		UM-1, UM-5orSMDJacket
6	JF45T15B	45.0375	4	3	±7.5	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
7	JF45T20A	45.0375	2	3	±10.0	15	±34.0	1	2		UM-1, UM-5orSMDJacket
8	JF45T20B	45.0375	4	3	±10.0	40	±48.0	1	3		UM-1x2, UM-5x2orSMDJacket
9	JF45T30A	45.0375	2	3	±15.0	15	±50.0	1	2		UM-1, UM-5orSMDJacket
10	JF45T30B	45.0375	4	3	±15.0	40	±60.0	1	3		UM-1x2, UM-5x2orSMDJacket

**45.1MHz Monolithic Crystal Filter(3<sup>rd</sup>-Overtone)**

1	JF45U07A	45.1	2	3	±3.75	10	±12.5	1	2.5		UM-1, UM-5orSMDJacket
2	JF45U07B	45.1	4	3	±3.75	30	±12.5	1	4		UM-1x2, UM-5x2orSMDJacket
3	JF45U12A	45.1	2	3	±6.0	15	±25.0	1	2		UM-1, UM-5orSMDJacket
4	JF45U12B	45.1	4	3	±6.0	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
5	JF45U15A	45.1	2	3	±7.5	15	±25.0	1	2		UM-1, UM-5orSMDJacket
6	JF45U15B	45.1	4	3	±7.5	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
7	JF45U20A	45.1	2	3	±10.0	15	±34.0	1	2		UM-1, UM-5orSMDJacket
8	JF45U20B	45.1	4	3	±10.0	40	±48.0	1	3		UM-1x2, UM-5x2orSMDJacket
9	JF45U30A	45.1	2	3	±15.0	15	±50.0	1	2		UM-1, UM-5orSMDJacket
10	JF45U30B	45.1	4	3	±15.0	40	±60.0	1	3		UM-1x2, UM-5x2orSMDJacket

**45.300MHz Monolithic Crystal Filter(3<sup>rd</sup>-Overtone)**

1	JF45V07A	45.3	2	3	±3.75	10	±12.5	1	2.5		UM-1, UM-5orSMDJacket
2	JF45V07B	45.3	4	3	±3.75	30	±12.5	1	4		UM-1x2, UM-5x2orSMDJacket
3	JF45V12A	45.3	2	3	±6.0	15	±25.0	1	2		UM-1, UM-5orSMDJacket
4	JF45V12B	45.3	4	3	±6.0	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
5	JF45V15A	45.3	2	3	±7.5	15	±25.0	1	2		UM-1, UM-5orSMDJacket
6	JF45V15B	45.3	4	3	±7.5	30	±25.0	1	3		UM-1x2, UM-5x2orSMDJacket
7	JF45V20A	45.3	2	3	±10.0	15	±34.0	1	2		UM-1, UM-5orSMDJacket
8	JF45V20B	45.3	4	3	±10.0	40	±48.0	1	3		UM-1x2, UM-5x2orSMDJacket
9	JF45V30A	45.3	2	3	±15.0	15	±50.0	1	2		UM-1, UM-5orSMDJacket
10	JF45V30B	45.3	4	3	±15.0	40	±60.0	1	3		UM-1x2, UM-5x2orSMDJacket

# Crystal Filter

## ■ Dimension (Unit: mm)

