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CRYSTAL FILTERS

Monolithic Crystal Filters

CHARACTERISTICS

SPECIFICATION (As Following) :

1MHz to 160MHz FOR FUNDAMENTAL AND OVERTONE MODE

Monolithic crystal filters, which cover range from 1 MHz to 100MHz, are relatively simple 2-pole devices and more complex, multipole unit up to 10 pole response.

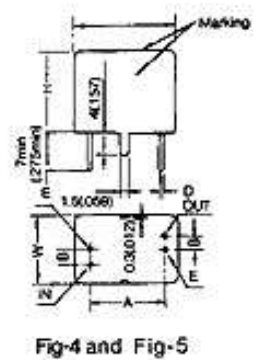
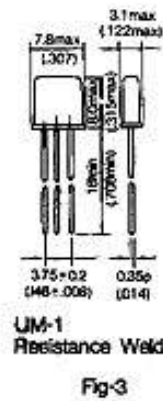
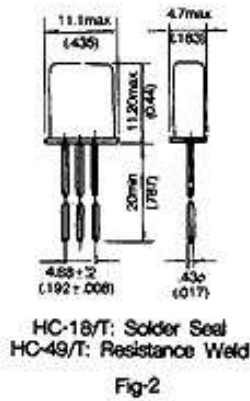
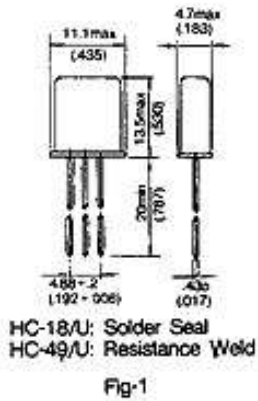
Monolithic crystal filters have many advantages such as compact size, high temperature stability ,and high reliability.

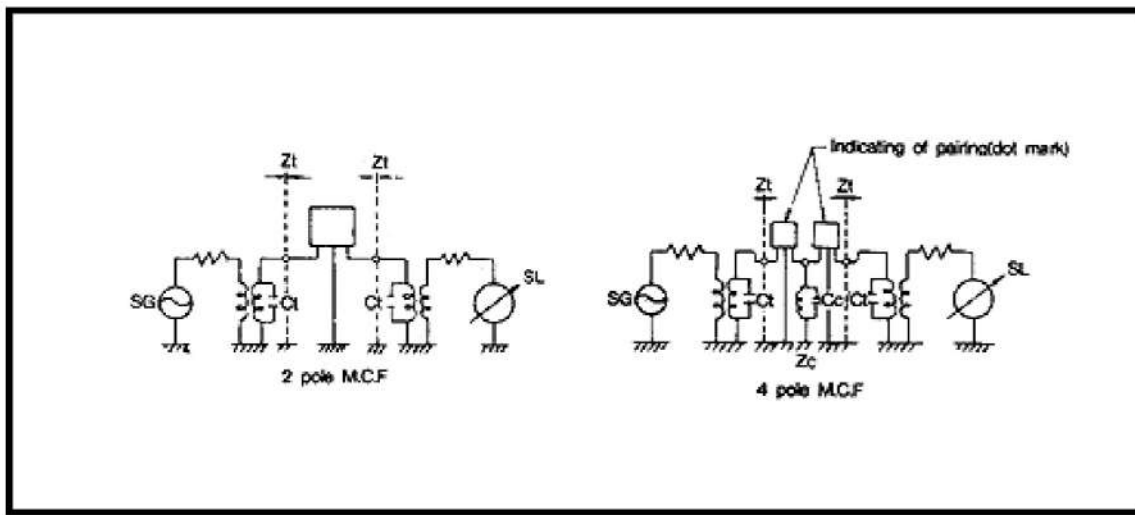
STANDARD SPK MCF

Model No	Center Frequency (MHz)	Channel spacing (KHz)	No.of Pole	Passband Width(Min)		Stopband Width(Max)		Insertion Loss dB(Max)	Passband Ripple dB(Max)	Termination Impedance Coupling(Cc) Kohm//PF	case
				dB	±KHz	dB	±KHz				
10M7A	10.695	12.5	2	6	3.5	20	10	2.0	0.5	1.0//10	Fig-1, Fig-2
10M7.5A	10.700	12.5	2	3	3.75	18	18	1.5	0.5	1.2//0	Fig-1, Fig-2
10M7.5B	10.700	12.5	4	3	3.75	40	12.5	2.5	1.0	1.2//0 Cc=10.0PF	Fig-1, Fig-2
10M7.5C	10.700	12.5	6	3	3.75	60	12.5	3.0	2.0	1.2//0	Fig-4
10M12A	10.700	20.0	2	3	6.0	20	25.0	1.5	0.5	3.0//0	Fig-1, Fig-2
10M12B	10.700	20.0	4	3	6.0	40	20.0	2.5	1.0	3.0//0 Cc=5.0PF	Fig-1, Fig-2
10M12C	10.700	20.0	6	3	6.0	60	20.0	3.0	2.0	3.0//0	Fig-4
10M15A	10.700	25.0	2	3	7.5	18	25.0	1.5	0.5	3.0//0	Fig-1, Fig-2
10M15B	10.700	25.0	4	3	7.5	40	25.0	2.5	1.0	3.0//0 Cc=2.0PF	Fig-1, Fig-2
10M15C	10.700	25.0	6	3	7.5	60	22.5	3.0	2.0	3.0//0	Fig-4
10M20A	10.700	35.0	2	3	10.0	18	35.0	2.0	0.5	3.9//0	Fig-1, Fig-2
10M20B	10.700	35.0	4	3	10.0	40	35.0	2.5	1.0	3.9//0 Cc=0.5PF	Fig-1, Fig-2

QUARTZ CRYSTAL UNIT

10M20C	10.700	35.0	6	3	10.0	60	30.0	3.0	2.0	3.9//0	Fig-4
10M30A	10.700	50.0	2	3	15.0	15	50.0	1.5	0.5	5.0// -1.5	Fig-1, Fig-2
10M30B	10.700	50.0	4	3	15.0	40	50.0	2.5	1.0	5.0// -1.5 Cc=0PF	Fig-1, Fig-2
10M30C	10.700	50.0	6	3	15.0	60	45.0	3.0	2.0	5.0// -1.5	Fig-4, Fig-5
21M7.5A	21.400	12.5	2	3	3.75	20	18.0	1.5	0.5	1.5//0	Fig-1, Fig-2, Fig-3
21M7.5B	21.400	12.5	4	3	3.75	40	14.0	2.5	1.0	1.5//0 Cc=16PF	Fig-1, Fig-2, Fig-3
21M7.5C	21.400	12.5	6	3	3.75	45	8.75	3.0	2.0	1.5//0	Fig-4, Fig-5
21M12A	21.400	20.05	2	3	6.0	20	25.0	1.5	0.5	1.5//0	Fig-1, Fig-2, Fig-3
21M12B	21.400	20.0	4	3	6.0	40	20.0	2.0	1.0	1.5//0 Cc=13PF	Fig-1, Fig-2, Fig-3
21M12C	21.400	20.0	6	3	6.0	65	20.0	2.5	2.0	1.5//0	Fig-4, Fig-5
21M15A	21.400	25.0	2	3	7.5	18	25.0	1.5	0.5	1.5//0	Fig-1, Fig-2, Fig-3
21M15B	21.400	25.0	4	3	7.5	40	25.0	2.0	1.0	1.5//0 Cc=7PF	Fig-1, Fig-2, Fig-3
21M15C	21.400	20.0	6	3	7.5	65	25.0	2.5	2.0	1.5//0	Fig-4, Fig-5
21M30A	21.400	50.0	2	3	15	15	45.0	1.5	0.5	1.5//0	Fig-1, Fig-2, Fig-3
21M30B	21.400	50.0	4	3	15	40	50.0	2.0	1.0	1.5//0 Cc=2PF	Fig-1, Fig-2, Fig-3
21M30C	21.400	50.0	6	3	15	65	50.0	2.5	2.0	1.5//0	Fig-4, Fig-5
45M15A	45.000	25.0	2	3	7.5	18	28.0	2.0	1.0	4.0// -1.5	Fig-1, Fig-2, Fig-3
45M15B	45.000	25.0	4	3	7.5	40	30.0	3.0	1.0	4.0// -1.5 Cc=-0.5PF	Fig-1, Fig-2, Fig-3
46M15A	46.610	25.0	2	3	7.5	18	30.0	2.5	1.0	4.0// -5.0	Fig-1, Fig-2, Fig-3
46M15B	46.610	25.0	4	3	7.5	40	30.0	3.0	1.0	4.0// -5.0 Cc=-0.5PF	Fig-1, Fig-2, Fig-3
49M15A	49.670	25.0	2	3	7.5	18	30.0	2.5	1.0	4.0//5.0	Fig-1, Fig-2, Fig-3
49M15B	49.670	25.0	4	3	7.5	40	30.0	3.0	1.0	4.0// -1.5	Fig-1, Fig-2, Fig-3
58M17B	58.1125	25.0	4	3	8.5	25	25.0	3.0	1.0	3.0// -1.5 Cc=-1.0PF	Fig-1, Fig-2, Fig-3





TEST CIRCUIT

	L	W	H	A	B	D Φ
C-1	11.0	8.5	11.5	7.4	2.0	0.3
C-2	13.4	8.5	11.0	9.8	2.0	0.3
C-3	15	12	15	9.0	2.5	0.43
C-4	18.5	12	15	13.4	2.5	0.43
C-5	23	12	15	17.8	2.5	0.43
C-6	28	12	15	22.2	2.5	0.43

(in mm)

	L	W	H	A	B	D Φ
C-1	.433	.335	.452	.291	.078	0.12
C-2	.527	.335	.433	.386	.078	0.12
C-3	.590	.472	.590	.354	.098	0.17
C-4	.728	.472	.590	.527	.098	0.17
C-5	.906	.472	.590	.701	.098	0.17
C-6	1.102	.472	.590	.874	.098	0.17

(in inch)

Home	About S.P.K.	Inquiry form	What's New	Products
Quartz crystal units (smd/dip/bend-lead)	Chip capacitor (tant/mlcc/alum)	Saw filters / resonators	GPS+GLONASS+GSM	(antenna/compact-receiver/G-mouse/data logger/AVL)
Crystal oscillators (clock/vcxo/tcxo/vc-tcxo/vco)	Ceramic filters	Ceramic Arresters	Piezoelectric ceramic element & Parts	
Real time clock module R.T.C.	Ceramic resonators	Condenser microphone unit	Acoustic Emission Sensors	
Crystal filters	Switch	Electro. Buzzer(Transducer)	DC Brushless Vibration Motor	
LED (SMD/DIP)	Touch Panel	I C		