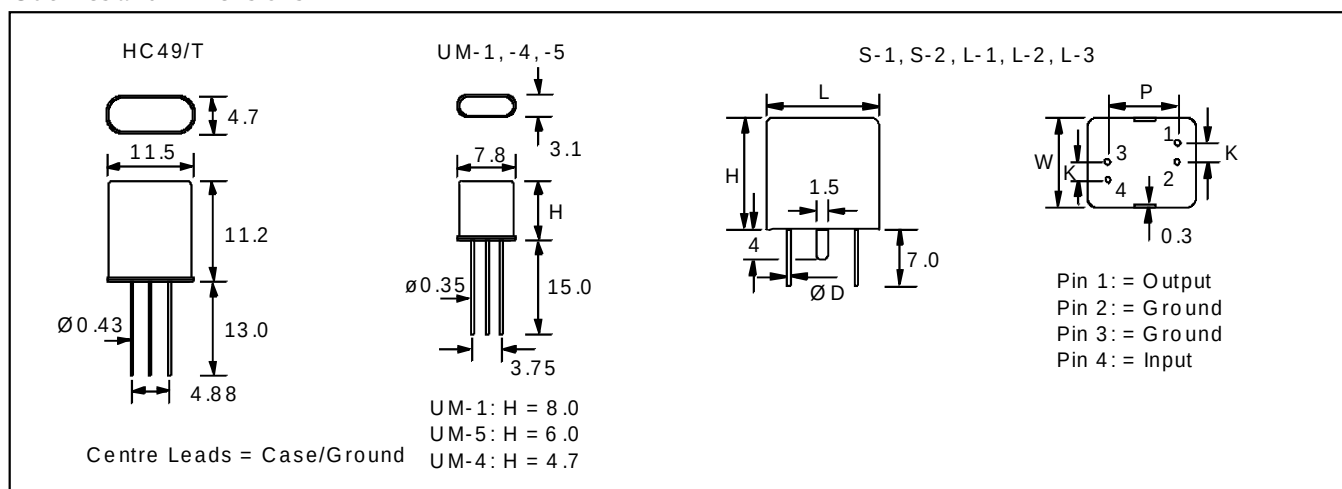




Monolithic Crystal Filters

Centre Frequencies 10.7, 21.4, 45, 55 and 70MHz

Outlines and Dimensions



Package Dimensions

Holder	L	W	H	P	K	DØ
S-1	11.0	8.5	11.5	7.4	2.0	0.3
S-2	13.4	8.5	11.5	9.8	2.0	0.3
L-1	15.0	12.0	15.0	9.0	2.5	0.4
L-2	18.5	12.0	15.0	13.4	2.5	0.4
L-3	23.0	12.0	15.0	17.8	2.5	0.4

MCF 10.7MHz Centre Frequency

Channel Spacing	Model Number	Poles	Nom. Freq. MHz	Pass Bandwidth dB $\pm$ kHz	Stop Bandwidth dB $\pm$ kHz	Ripple dB max.	Insert. Loss dB max.	Guaranteed Attenuation dB fo kHz - kHz	Terminating Impedance kOhm/pF	Package
12.5kHz	10M07A	2	10.7	3 $\pm$ 3.75	20 $\pm$ 18	0.5	1.5	35 +300 to +1000 50 -200 to -1000	1.8//5	HC49T
12.5kHz	10M07B	4	10.7	3 $\pm$ 3.75	40 $\pm$ 14	1	2.5	65 +300 to +1000 80 -200 to -1000	1.8//4.5	HC49T x2 (Pair)
12.5kHz	10M07C	6	10.7	3 $\pm$ 3.75	45 $\pm$ 8.75	2	3.5	65 $\pm$ 12.5 to $\pm$ 300	1.8//3.5	L-1
12.5kHz	10M07D	8	10.7	3 $\pm$ 3.75	65 $\pm$ 8.75	2	4	90 $\pm$ 12.5 to $\pm$ 300	1.8//3.5	L-2
25kHz	10M15A	2	10.7	3 $\pm$ 7.5	18 $\pm$ 25	0.5	2	35 +300 to +1000 40 -200 to -1000	3//2	HC49T
25kHz	10M15B	4	10.7	3 $\pm$ 7.5	40 $\pm$ 25	1	2.5	55 +300 to +1000 80 -200 to -1000	3//2	HC49T x2 (Pair)
25kHz	10M15C	6	10.7	3 $\pm$ 7.5	45 $\pm$ 17.5	2	3	65 $\pm$ 25 to $\pm$ 300	3//1.5	L-1
25kHz	10M15D	8	10.7	3 $\pm$ 7.5	70 $\pm$ 17.5	2	4	90 $\pm$ 25 to $\pm$ 300	3//1.5	L-2
25kHz	10M15E	10	10.7	3 $\pm$ 7.5	75 $\pm$ 15	2	4.5	90 $\pm$ 20 to $\pm$ 300	3//1.5	L-3

Specification no: FP/F11/Issue 3/98



Monolithic Crystal Filters

Centre Frequencies 10.7, 21.4, 45, 55 and 70MHz

MCF 21.4MHz Centre Frequency

Channel Spacing	Model Number	Poles	Nom. Freq. MHz	Pass Bandwidth dB $\pm$ kHz	Stop Bandwidth dB $\pm$ kHz	Ripple dB max.	Insert. Loss dB max.	Guaranteed Attenuation dB fo kHz - kHz	Terminating Impedance kOhm/pF	Package
12.5kHz	21M07A	2	21.4	3 $\pm$ 3.75	20 $\pm$ 18	0.5	2	35 +350 to +1000 50 -200 to -1000	850//6	UM-1
12.5kHz	21M07A5	2	21.4	3 $\pm$ 3.75	18 $\pm$ 12.5	0.5	2	75 -910	1500//6	UM-5
12.5kHz	21M07A4	2	21.4	3 $\pm$ 3.75	18 $\pm$ 12.75	0.5	2	75 -910	1500//6	UM-4
12.5kHz	21M07B	4	21.4	3 $\pm$ 3.75	40 $\pm$ 14	1	2.5	65 +350 to +1000 80 -200 to -1000	850//5	UM-1 x2 (Pair)
12.5kHz	21M07B5	4	21.4	3 $\pm$ 3.75	35 $\pm$ 12.5	1	2.5	90 $\pm$ 910	850//5	UM-5 x2 (Pair)
12.5kHz	21M07B4	4	21.4	3 $\pm$ 3.75	35 $\pm$ 12.5	1	2.5	90 $\pm$ 910	850//5	UM-4 x2 (Pair)
12.5kHz	21M07C	6	21.4	3 $\pm$ 3.75	45 $\pm$ 8.75 65 $\pm$ 12.5	2	3	65 $\pm$ 12.5 to $\pm$ 300	850//5	S-1
12.5kHz	21M07D	8	21.4	3 $\pm$ 3.75	65 $\pm$ 9 90 $\pm$ 12.5	2	4	90 $\pm$ 12.5 to $\pm$ 300	850//5	S-1
12.5kHz	21M07E	10	21.4	3 $\pm$ 3.75	75 $\pm$ 8.75 90 $\pm$ 10.5	2	4.5	90 $\pm$ 12.5 to $\pm$ 300	850//5	S-2
25kHz	21M15A5	2	21.4	3 $\pm$ 7.5	18 $\pm$ 25	0.5	3	75 -910	1.5k//3.0	UM-5
25kHz	21M15B	4	21.4	3 $\pm$ 7.5	40 $\pm$ 25	1	4	65 +350 to +1000 80 -20 to -1000	1.5k//2.0	UM-1 (Pair)
25kHz	21M15B5	4	21.4	3 $\pm$ 7.5	40 $\pm$ 25	1	4.5	90 $\pm$ 910	1.5k//6.0	UM-5 (Pair)
25kHz	21M15C	6	21.4	3 $\pm$ 7.5	45 $\pm$ 17.5 65 $\pm$ 25	2	2.5	65 $\pm$ 25 to $\pm$ 300	1.5k//2.0	S-1
25kHz	21M15D	8	21.4	3 $\pm$ 7.5	65 $\pm$ 17.5 90 $\pm$ 25	2		90 $\pm$ 25 to $\pm$ 300	1.5k//2.0	S-1
25kHz	21M15E	10	21.4	6 $\pm$ 7.5	75 $\pm$ 17.5 90 $\pm$ 2	2		90 $\pm$ 25 to $\pm$ 300	1.5k//2.0	S-2

MCF 45MHz Centre Frequency

Model Number	Poles	Nom. Freq. MHz	Pass Bandwidth dB $\pm$ kHz	Stop Bandwidth dB $\pm$ kHz	Ripple dB max.	Insertion Loss dB max.	Guaranteed Attenuation dB fo kHz - kHz	Terminating Impedance kOhm/pF	Package
45M7.5A	2	45	3 $\pm$ 3.75	10 $\pm$ 12.5	1	2	65 -910	350//10.5	UM-1
45M7.5B	4	45	3 $\pm$ 3.75	30 $\pm$ 12.5	1	4	90 +910	350//6.5	UM-1 x2 (Pair)
45M15A	2	45	3 $\pm$ 7.5	15 $\pm$ 25	1	2	75 -910	650//5	UM-1
45M15B	4	45	3 $\pm$ 7.5	30 $\pm$ 25	1	3	90 $\pm$ 910	650//3	UM-1 x2 (Pair)
45M15BU5	4	45	3 $\pm$ 7.5	30 $\pm$ 25	1	3	90 $\pm$ 910	650//3	UM-5 x2 (Pair)
45M15BU4	4	45	3 $\pm$ 7.5	30 $\pm$ 25	1	3	90 $\pm$ 910	650//3	UM-4 x2 (Pair)
45M20A	2	45	3 $\pm$ 10	15 $\pm$ 30	1	2	65 -910	910//2.5	UM-1
45M20B	4	45	3 $\pm$ 10	40 $\pm$ 40	1	2	80 -500 to -1000 80 +500 to +1000	100//1.5	UM-1 x2 (Pair)
45M30A	2	45	3 $\pm$ 15	15 $\pm$ 50	1	2	70 -910	1200//1.5	UM-1
45M30B	4	45	3 $\pm$ 15	35 $\pm$ 50	1	3	90 $\pm$ 910	1200//0.7	UM-1 x2 (Pair)

Specification no: FP/F11/Issue 3/98