

Monolithic Crystal Filters

21.4MHz UM-1 FAMILY

STANDARD THROUGH-HOLE MCF

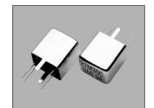
STANDARD SPECIFICATIONS

Part number	Nominal Frequency fo	Passband min.		Stopband max.		Attention Guaranteed min.		Ripple max.	Loss max.	Terminating Impedance	Coupling Capacitor	Operating Temperature	No. of Pole
	(MHz)	(dB)	(kHz)	(dB)	(kHz)	(dB)	(kHz)	(dB)	(dB)	(Ω//pF)	(pF)	(°C)	
21M7.5	21.4	3	±3.75	20	±18.0	35/50	+350 to +1000 -200 to -1000	0.5	1.5	850//6.0	—	-30 to +80	2
21M7.5A4	21.4	3	±3.75	20	±18.0	35/50	+350 to +1000 -200 to -1000	0.5	2.0	850//5.5	—	-30 to +80	2
21M7.5B	21.4	3	±3.75	40	±14.0	65/80	+350 to +1000 -200 to -1000	1.0	2.5	850//5.0	16	-30 to +80	4 (2 pcs.)
21M7.5B4	21.4	3	±3.75	40	±14.0	65/80	+350 to +1000 -200 to -1000	1.0	3.0	1000//4.5	12	-30 to +80	4 (2 pcs.)
21M7.5C	21.4	3	±3.75	45	±8.75	65	±12.5 to ±300	2.0	3.0	850//5.0	—	-30 to +80	6 (SC-1/3/4)
21M7.5D	21.4	3	±3.75	65	±9.0	90	±12.5 to ±300	2.0	4.0	850//5.0	—	-30 to +80	8 (SC-1/3/4)
21M12A	21.4	3	±6.0	20	±25.0	35/50	+350 to +1000 -200 to -1000	0.5	1.5	1200//3.0	—	-30 to +80	2
21M12A4	21.4	3	±6.0	20	±25.0	35/50	+350 to +1000 -200 to -1000	0.5	2.0	1200//3.0	—	-30 to +80	2
21M12B	21.4	3	±6.0	40	±20.0	65/80	+350 to +1000 -200 to -1000	1.0	2.0	1200//2.5	10.5	-30 to +80	4 (2 pcs.)
21M12B4	21.4	3	±6.0	40	±20.0	65/80	+350 to +1000 -200 to -1000	1.0	3.0	1600//2.5	7	-30 to +80	4 (2 pcs.)
21M12C	21.4	3	±6.0	45	±14.0	65	±20 to ±300	2.0	2.5	1200//2.5	—	-30 to +80	6 (SC-1/3/4)
21M12D	21.4	3	±6.0	65	±14.0	90	±20 to ±300	2.0	3.0	1200//2.5	—	-30 to +80	8 (SC-1/3/4)
21M15A	21.4	3	±7.5	18	±25.0	35/50	+350 to +1000 -200 to -1000	1.5	1.5	1500//2.5	—	-30 to +80	2
21M15A4	21.4	3	±7.5	15	±25.0	35/50	+350 to +1000 -200 to -1000	0.5	2.0	1500//2.0	—	-30 to +80	2
21M15B	21.4	3	±7.5	40	±25.0	65/80	+350 to +1000 -200 to -1000	1.0	2.0	1500//2.0	8	-30 to +80	4 (2 pcs.)
21M15B4	21.4	3	±7.5	40	±25.0	65/80	+350 to +1000 -200 to -1000	1.0	4.0	1900//2.0	5	-30 to +80	4 (2 pcs.)
21M15C	21.4	3	±7.5	45	±17.5	65	±25 to ±300	2.0	2.5	1500//2.0	—	-30 to +80	6 (SC-1/3/4)
21M15D	21.4	3	±7.5	65	±17.5	90	±25 to ±300	2.0	3.0	1500//2.0	—	-30 to +80	8 (SC-1/3/4)
21M20A	21.4	3	±10.0	15	±30.0	35/50	+350 to +1000 -350 to -1000	0.5	2.0	1800//2.5	—	-30 to +80	2
21M20B	21.4	3	±10.0	45	±35.0	65/80	+350 to +1000 -200 to -1000	1.0	2.0	1800//1.5	5	-30 to +80	4 (2 pcs.)
21M20C	21.4	3	±10.0	60	±34.0	60	±34 to ±300	2.0	2.5	1800//1.5	—	-30 to +80	6 (SC-1/3/4)
21M20D	21.4	3	±10.0	80	±30.0	80	±30 to ±300	2.0	3.0	1800//1.5	—	-30 to +80	8 (SC-1/3/4)
21M30A	21.4	3	±15.0	15	±45.0	35/45	+350 to +1000 -350 to -1000	0.5	1.5	1500//1	—	-30 to +80	2
21M30B	21.4	3	±15.0	40	±50.0	65/80	+350 to +1000 -250 to -1000	1.0	2.0	2000//0.5	3	-30 to +80	4 (2 pcs.)
21M30C	21.4	3	±15.0	65	±50.0	65	±50 to ±300	2.0	2.5	2200//0.5	—	-30 to +80	6 (SC-1/3/4)
21M30D	21.4	3	±15.0	80	±50.0	80	±50 to ±300	2.0	3.0	2200//0.5	—	-30 to +80	8 (SC-1/3/4)
P/N	Contact us for other frequencies or other specifications												

PACKAGE DATA

Item	Package	UM-1 / 8H	UM-1 / 6H	UM-1 / 4H	SC-1 / 3 / 4
		UM-1S / 8H	UM-1S / 6H	UM-1S / 4H	
Cover		Metal	Metal	Metal	Metal
Base		Metal	Metal	Metal	Metal (UM-1)
Sealing		Resistance weld	Resistance weld	Resistance weld	Resistance weld (UM-1)
Terminal lead		Alloy (FeNiCo)	Alloy (FeNiCo)	Alloy (FeNiCo)	Alloy (FeNiCo)
Terminal lead plating		Gold	Gold	Gold	Gold
RoHS		Compliant (Pb-Free)	Compliant (Pb-Free)	Compliant (Pb-Free)	Compliant (Pb-Free)

SC-1



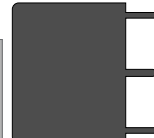
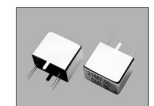
Actual Size

SC-3



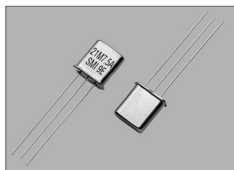
Actual Size

SC-4



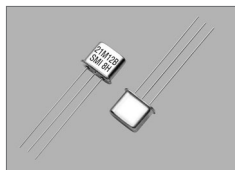
Actual Size

UM-1/8H & UM-1S/8H



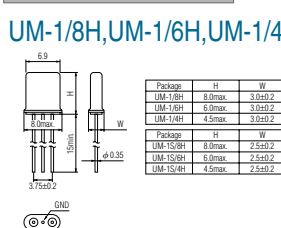
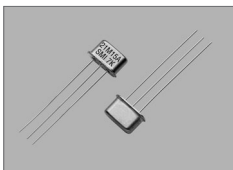
Actual Size

UM-1/6H & UM-1S/6H



Actual Size

UM-1/4H & UM-1S/4H

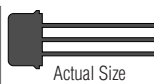


UM-1/8H, UM-1/6H, UM-1/4H

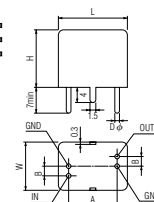
Package	H	W
UM-1/8H	8.0max	3.0±0.2
UM-1/6H	8.0max	3.0±0.2
UM-1/4H	4.5max	3.0±0.2

Package	H	W
UM-1S/8H	8.0max	2.5±0.2
UM-1S/6H	6.0max	2.5±0.2
UM-1S/4H	4.5max	2.5±0.2

SC-1/3/4



Actual Size



Case	L	W	H	A	B	D	φ
SC-1	11.0	8.5	11.5	7.4	2.0	0.30	
SC-3	15.0	12.0	15.0	9.0	2.5	0.43	
SC-4	18.5	12.0	15.0	13.4	2.5	0.43	