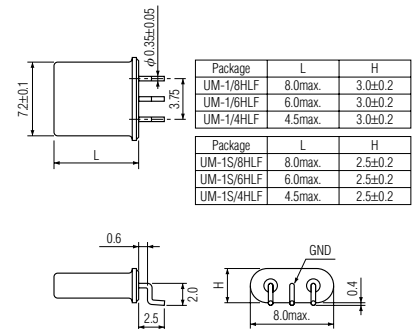


### STANDARD SPECIFICATIONS

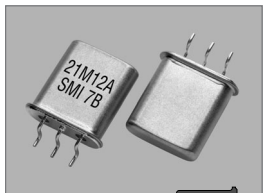
Part number	Nominal Frequency fo	Passband min.		Stopband max.		Attention Guaranteed min.		Ripple max.	Loss max.	Terminating Impedance	Coupling Capacitor	Operating Temperature	No. of Pole
	(MHz)	(dB)	(kHz)	(dB)	(kHz)	(dB)	(kHz)	(dB)	(dB)	(Ω//pF)	(pF)	(°C)	
21M7.5A(HLF)	21.4	3	±3.75	20	±18.0	35 50	+350 to +1000 -200 to -1000	0.5	1.5	850/6.0	—	-30 to +80	2
21M7.5B(HLF)	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.)
21M12A(HLF)	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
21M12B(HLF)	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.)
21M15A(HLF)	21.4	3	±7.5	18	±25.0	35 50	+350 to +1000 -200 to -1000	0.5	1.5	1500/2.5	—	-30 to +80	2
21M15B(HLF)	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.)
21M30A(HLF)	21.4	3	±15.0	15	±45.0	35 45	+350 to +1000 -300 to -1000	0.5	1.5	1500/1.0	—	-30 to +80	2
21M30B(HLF)	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.)
45M7.5A(HLF)	45	3	±3.75	10	±12.5	65	-910	1.0	2.0	200/4.0	—	-30 to +80	2
45M7.5B(HLF)	45	3	±3.75	30	±12.5	90	±900 to ±1000	1.0	4.0	350/6.5	18	-30 to +80	4 (2 pcs.)
45M15A(HLF)	45	3	±7.5	15	±25.0	35 65	+900 to +1000 -900 to -1000	1.0	2.0	650/3.0	—	-30 to +80	2
45M15B(HLF)	45	3	±7.5	30	±25.0	90	±900 to ±1000	1.0	3.0	650/3.0	9	-30 to +80	4 (2 pcs.)
45M30A(HLF)	45	3	±15.0	15	±60.0	35 65	+900 to +1000 -900 to -1000	1.5	2.5	1200/0	—	-30 to +80	2
45M30B(HLF)	45	3	±15.0	30	±50.0	80	±900 to ±1000	1.0	3.0	1200/0.7	3.5	-30 to +80	4 (2 pcs.)
45M7.5A3(HLF)	45 (3rd OT)	3	±3.75	10	±12.5	35	±910	1.0	2.0	2000/-0.4	—	-30 to +80	2
45M7.5B3(HLF)	45 (3rd OT)	3	±3.75	30	±12.5	75	±910	1.0	4.0	3000/-0.3	-0.1	-30 to +80	4 (2 pcs.)
45M15A3(HLF)	45 (3rd OT)	3	±7.5	15	±25.0	35	±910	1.0	2.0	4000/-0.7	—	-30 to +80	2
45M15B3(HLF)	45 (3rd OT)	3	±7.5	30	±25.0	75	±910	1.0	4.0	4000/-0.8	-1.0	-30 to +80	4 (2 pcs.)
P/N	Contact us for other frequencies or other specifications												

### PACKAGE DATA

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

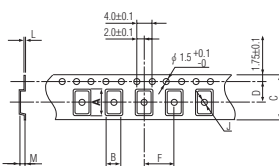


### UM-1/8HLF & UM-1S/8HLF



Actual Size

### TAPE SPECIFICATIONS



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
8.9	8.2	24.0	11.5	12.0	1.5	0.4	3.3	330	1000pcs

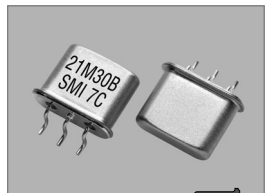
### for UM-1/6HLF & UM-1S/6HLF

A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
6.9	8.2	24.0	11.5	12.0	1.5	0.4	3.3	330	1000pcs

### for UM-1/4HLF & UM-1S/4HLF

A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
5.4	8.2	24.0	11.5	12.0	1.5	0.4	3.3	330	1000pcs

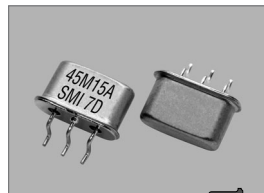
### UM-1/6HLF & UM-1S/6HLF



Actual Size

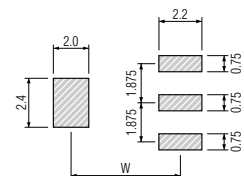
### for UM-1/8HLF & UM-1S/8HLF

### UM-1/4HLF & UM-1S/4HLF



Actual Size

### SOLDERING PATTERN



Holder	W
UM-1/8HLF & UM-1S/8HLF	10.0
UM-1/6HLF & UM-1S/6HLF	8.0
UM-1/4HLF & UM-1S/4HLF	6.6