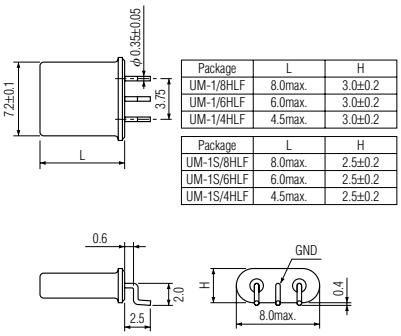
STANDARD SPECIFICATIONS

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

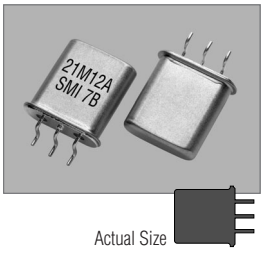
Item \ Package	UM-1 / 8HLF UM-1S / 8HLF	UM-1 / 6HLF UM-1S / 6HLF	UM-1 / 4HLF UM-1S / 4HLF
Cover	Metal	Metal	Metal
Base	Metal	Metal	Metal
Sealing	Resistance weld	Resistance weld	Resistance weld
Terminal lead	Alloy (FeNiCo)	Alloy (FeNiCo)	Alloy (FeNiCo)
Terminal lead plating	Gold	Gold	Gold
RoHS	Compliant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



Package	L	H
UM-1/8HLF	8.0max.	3.0±0.2
UM-1/6HLF	6.0max.	3.0±0.2
UM-1/4HLF	4.5max.	3.0±0.2

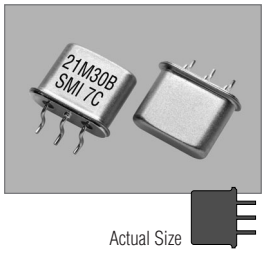
Package	L	H
UM-1S/8HLF	8.0max.	2.5±0.2
UM-1S/6HLF	6.0max.	2.5±0.2
UM-1S/4HLF	4.5max.	2.5±0.2

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



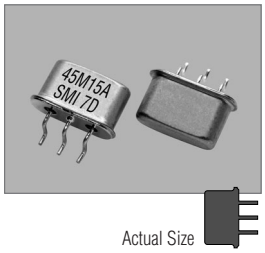
Actual Size

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



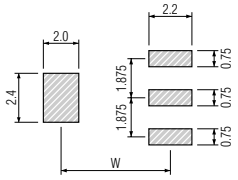
Actual Size

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



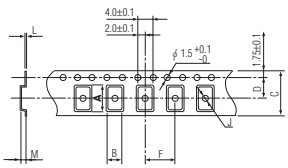
Actual Size

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

TAPE SPECIFICATIONS



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

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