

12.5kHz Channel Spacing

Model Number	Centre Frequency (MHz)	Number of Poles	Pass Band dB @ kHz	Attenuation Band dB @ kHz	In-Band Ripple (dB)	Insertion Loss (dB)	Guaranteed Attenuation (dB @ kHz)	Termination (Ω // pF)	Package Style
21G7A	21.400	2	3 \pm 3.75	20 \pm 18.0	0.5	1.5	35 +350 ~ +1000 50 -200 ~ -1000	850 // 6.0	UM-1/3L
21G7B	21.400	4	3 \pm 3.75	40 \pm 14.0	1.0	2.5	65 +350 ~ +1000 80 -200 ~ -1000	850 // 5.0 ($C_c=16\text{pF}$)	UM-1/3Lx2
21G7C	21.400	6	3 \pm 3.75	65 \pm 12.5	2.0	3.0	65 \pm 12.5 ~ \pm 300	850 // 5.0	F11/8A
21G7D	21.400	8	3 \pm 3.75	90 \pm 12.5	2.0	4.0	90 \pm 12.5 ~ \pm 300	850 // 5.0	F11/8A

20.0kHz Channel Spacing

Model Number	Centre Frequency (MHz)	Number of Poles	Pass Band dB @ kHz	Attenuation Band dB @ kHz	In-Band Ripple (dB)	Insertion Loss (dB)	Guaranteed Attenuation (dB @ kHz)	Termination (Ω // pF)	Package Style
21G12A	21.400	2	3 \pm 6.0	20 \pm 25.0	0.5	1.5	35 +350 ~ +1000 50 -200 ~ -1000	1200 // 3.0	UM-1/3L
21G12B	21.400	4	3 \pm 6.0	40 \pm 20.0	1.0	2.5	65 +350 ~ +1000 80 -200 ~ -1000	1200 // 2.5 ($C_c=10.5\text{pF}$)	UM-1/3Lx2
21G12C	21.400	6	3 \pm 6.0	65 \pm 20.0	2.0	2.5	65 \pm 20.0 ~ \pm 300	1200 // 2.5	F11/8A
21G12D	21.400	8	3 \pm 6.0	90 \pm 20.0	2.0	3.0	90 \pm 20.0 ~ \pm 300	1200 // 2.5	F11/8A
21G12E	21.400	10	3 \pm 6.0	75 \pm 14.0 90 \pm 16.0	2.0	3.5		1200 // 2.0	F13/8A

25.0kHz Channel Spacing

Model Number	Centre Frequency (MHz)	Number of Poles	Pass Band dB @ kHz	Attenuation Band dB @ kHz	In-Band Ripple (dB)	Insertion Loss (dB)	Guaranteed Attenuation (dB @ kHz)	Termination (Ω // pF)	Package Style
21G15A	21.400	2	3 \pm 7.5	18 \pm 25.0	0.5	1.5	35 +350 ~ +1000 50 -200 ~ -1000	1500 // 2.0	UM-1/3L
21G15B	21.400	4	3 \pm 7.5	40 \pm 25.0	1.0	2.5	65 +350 ~ +1000 80 -200 ~ -1000	1500 // 2.0 ($C_c=8.0\text{pF}$)	UM-1/3Lx2
21G15C	21.400	6	3 \pm 7.5	65 \pm 25.0	2.0	2.5	65 \pm 25.0 ~ \pm 300	1500 // 2.0	F11/8A
21G15D	21.400	8	3 \pm 7.5	90 \pm 25.0	2.0	3.0	90 \pm 25.0 ~ \pm 300	1500 // 2.0	F11/8A
21G15E	21.400	10	6 \pm 7.5	75 \pm 16.0 90 \pm 18.0	2.0	4.0		1600 // 2.0	F13/8A

35.0kHz Channel Spacing

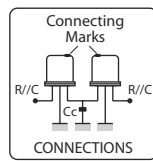
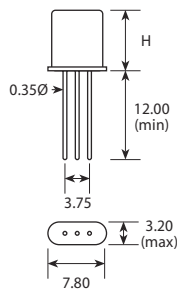
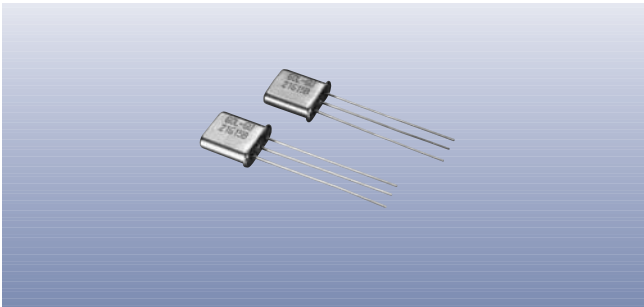
Model Number	Centre Frequency (MHz)	Number of Poles	Pass Band dB @ kHz	Attenuation Band dB @ kHz	In-Band Ripple (dB)	Insertion Loss (dB)	Guaranteed Attenuation (dB @ kHz)	Termination (Ω // pF)	Package Style
21G20A	21.400	2	3 \pm 10.0	18 \pm 34.0	0.5	2.0	35 +350 ~ +1000 50 -200 ~ -1000	1800 // 1.5	UM-1/3L
21G20B	21.400	4	3 \pm 10.0	40 \pm 35.0	1.0	2.5	65 \pm 300 ~ \pm 1000	1500 // 2.0 ($C_c=6.5\text{pF}$)	UM-1/3Lx2
21G20C	21.400	6	3 \pm 10.0	60 \pm 34.0	2.0	2.5	60 \pm 34.0 ~ \pm 300	1800 // 1.5	F11/8A
21G20D	21.400	8	3 \pm 10.0	80 \pm 30.0	2.0	3.0	80 \pm 30.0 ~ \pm 300	1800 // 1.5	F11/8A

50.0kHz Channel Spacing

Model Number	Centre Frequency (MHz)	Number of Poles	Pass Band dB @ kHz	Attenuation Band dB @ kHz	In-Band Ripple (dB)	Insertion Loss (dB)	Guaranteed Attenuation (dB @ kHz)	Termination (Ω // pF)	Package Style
21G30A	21.400	2	3 \pm 15.0	15 \pm 45.0	0.5	1.5	35 +350 ~ +1000 45 -300 ~ -1000	3000 // 0.5	UM-1/3L
21G30B	21.400	4	3 \pm 15.0	40 \pm 50.0	1.0	2.5	65 +350 ~ +1000 80 -300 ~ -1000	3000 // -0.5 ($C_c=3.0\text{pF}$)	UM-1/3Lx2
21G30C	21.400	6	3 \pm 15.0	65 \pm 50.0	2.0	2.5	65 \pm 50.0 ~ \pm 300	2200 // 0.5	F11/8A
21G30D	21.400	8	3 \pm 15.0	80 \pm 50.0	2.0	3.0	80 \pm 50.0 ~ \pm 300	2200 // 0.5	F11/8A

- ◆ Operating temperature range of -20 to +70°C.
- ◆ Most UM-1 models also available in UM-4 or UM-5
- ◆ Formed leads and jacket SM option for UM-1, UM-4, UM-5

UM-1/3L, UM-4/3L & UM-5/3L

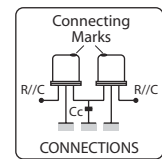
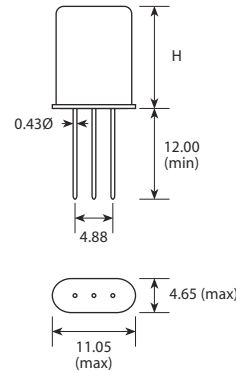
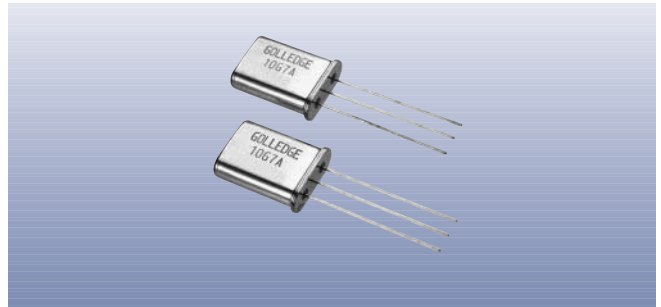


Package	Height H
UM-1/3L	8.00 max
UM-4/3L	4.80 max
UM-5/3L	6.00 max

UM-1/3Lx2 is a pair of UM-1/3Ls connected as shown.

Scale 1:1

HC49/3L & HC49T/3L

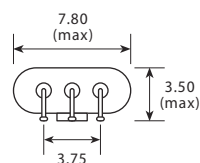
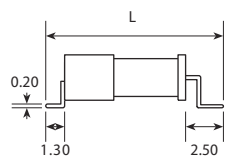
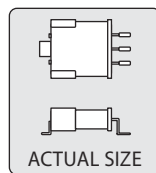
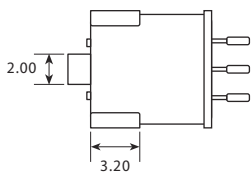
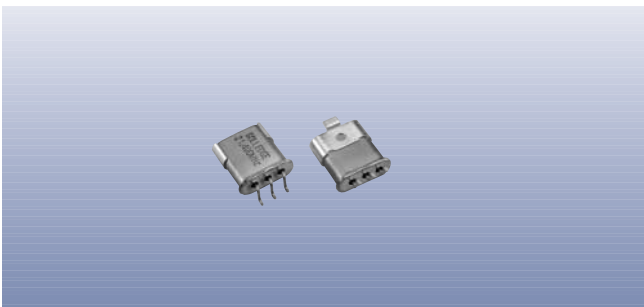


Package	Height H
HC49	13.46 max
HC49T	11.70 max

HC49/3Lx2 is a pair of HC49/3Ls connected as shown.

Scale 1:1

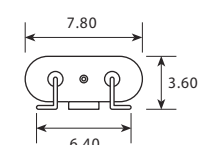
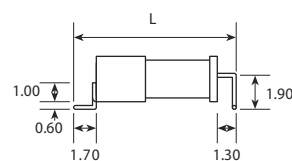
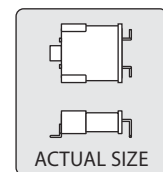
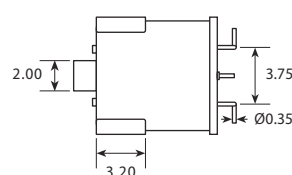
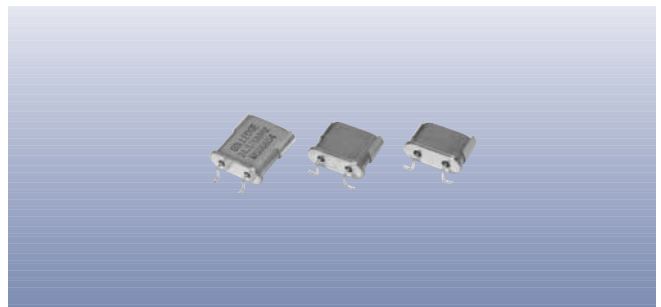
UM-1JN/3L, UM-4JN/3L & UM-5JN/3L



Package	Length L
UM-1JN/3L	12.50 max
UM-4JN/3L	9.30 max
UM-5JN/3L	10.50 max

Scale 2:1

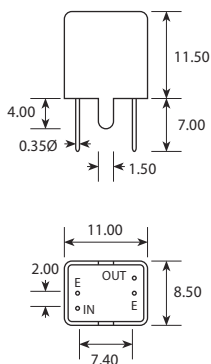
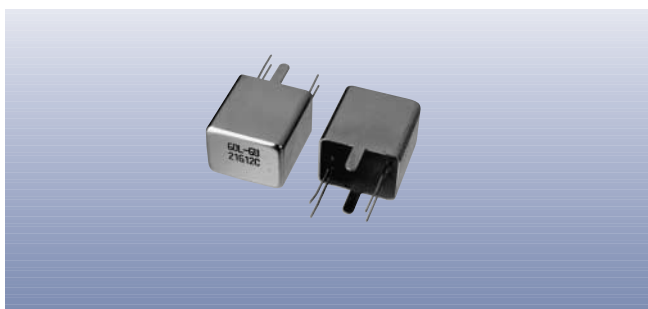
UM-1JC/3L, UM-4JC/3L & UM-5JC/3L



Package	Length L
UM-1JC/3L	11.10 max
UM-4JC/3L	7.80 max
UM-5JC/3L	9.00 max

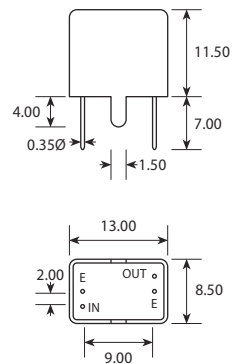
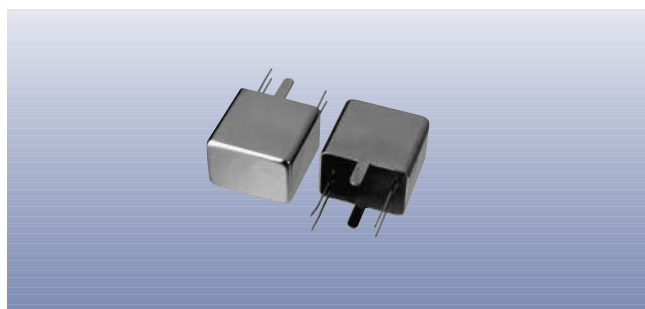
Scale 2:1

F11/8A



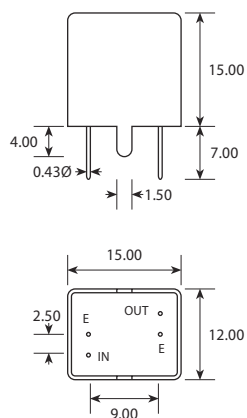
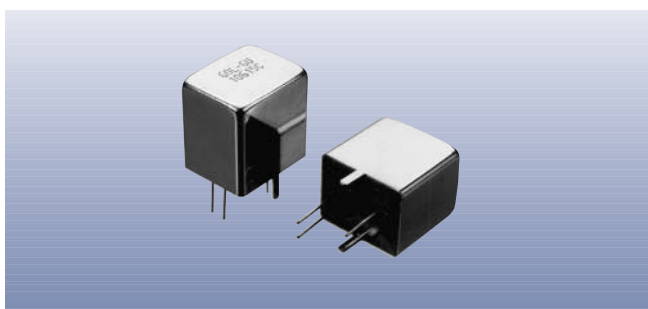
Scale 1:1

F13/8A



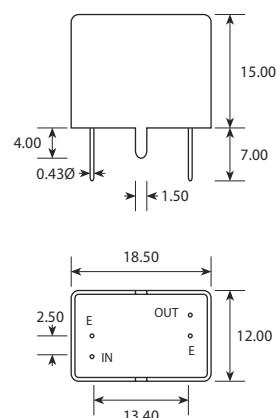
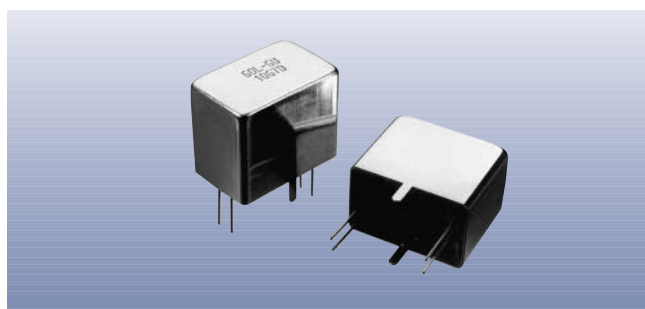
Scale 1:1

F15/12B



Scale 1:1

F18/12P



Scale 1:1