



## 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 ( $\Omega$ // pF)	Package Style
10G7A	10.700	2	3 $\pm$ 3.75	20 $\pm$ 18.0	0.5	1.5	35 +300 ~ +1000 40 -200 ~ -1000	1800 // 6.0	HC49/3L
10G7B	10.700	4	3 $\pm$ 3.75	40 $\pm$ 14.0	1.0	2.5	50 +300 ~ +1000 70 -200 ~ -1000	1800 // 5.0 ( $C_c=11.0\text{pF}$ )	HC49/3Lx2
10G7C	10.700	6	3 $\pm$ 3.75	65 $\pm$ 12.5	2.0	3.5	65 $\pm$ 12.5 ~ $\pm$ 300	1800 // 5.0	F15/12B
10G7D	10.700	8	3 $\pm$ 3.75	90 $\pm$ 12.5	2.0	4.0	90 $\pm$ 12.5 ~ $\pm$ 300	1800 // 5.0	F18/12P

## 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 ( $\Omega$ // pF)	Package Style
10G12A	10.700	2	3 $\pm$ 6.0	20 $\pm$ 25.0	0.5	1.5	35 +300 ~ +1000 40 -200 ~ -1000	3300 // 1.5	HC49/3L
10G12B	10.700	4	3 $\pm$ 6.0	40 $\pm$ 20.0	1.0	2.5	50 +300 ~ +1000 70 -200 ~ -1000	3300 // 1.5 ( $C_c=6.0\text{pF}$ )	HC49/3Lx2
10G12C	10.700	6	3 $\pm$ 6.0	65 $\pm$ 20.0	2.0	3.0	65 $\pm$ 20.0 ~ $\pm$ 300	3300 // 2.0	F15/12B
10G12D	10.700	8	6 $\pm$ 6.0	90 $\pm$ 20.0	2.0	3.5	90 $\pm$ 20.0 ~ $\pm$ 300	3300 // 2.0	F18/12P

## 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 ( $\Omega$ // pF)	Package Style
10G15A	10.700	2	3 $\pm$ 7.5	18 $\pm$ 25.0	0.5	1.5	35 +300 ~ +1000 40 -200 ~ -1000	3000 // 2.0	HC49/3L
10G15B	10.700	4	3 $\pm$ 7.5	40 $\pm$ 25.0	1.0	2.5	50 +300 ~ +1000 70 -200 ~ -1000	3000 // 2.0 ( $C_c=5.0\text{pF}$ )	HC49/3Lx2
10G15C	10.700	6	3 $\pm$ 7.5	65 $\pm$ 25.0	2.0	3.0	65 $\pm$ 25.0 ~ $\pm$ 300	3300 // 1.5	F15/12B
10G15D	10.700	8	6 $\pm$ 7.5	90 $\pm$ 25.0	2.0	3.5	90 $\pm$ 25.0 ~ $\pm$ 300	3300 // 1.5	F18/12P

## 35.0kHz Channel Spacing

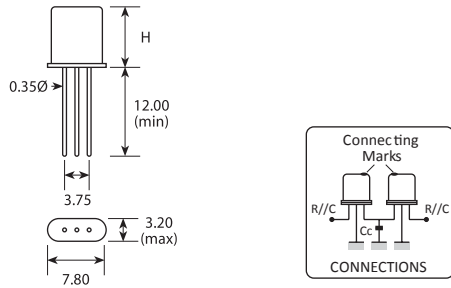
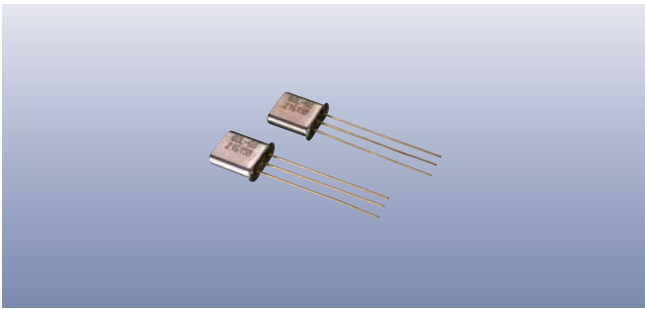
Model Number	Centre Frequency (MHz)	Number of Poles	Pass Band dB @ kHz	Attenuation Band dB @ kHz	In-Band Ripple (dB)	Insertion Loss (dB)	Guaranteed Attenuation (dB @ kHz)	Termination ( $\Omega$ // pF)	Package Style
10G20A	10.700	2	3 $\pm$ 10.0	18 $\pm$ 34.0	0.5	1.5	35 +300 ~ +1000 40 -200 ~ -1000	3900 // 1.0	HC49/3L
10G20B	10.700	4	3 $\pm$ 10.0	40 $\pm$ 34.0	1.0	2.5	50 +300 ~ +1000 70 -200 ~ -1000	3900 // 1.0 ( $C_c=3.0\text{pF}$ )	HC49/3Lx2
10G20C	10.700	6	3 $\pm$ 10.0	60 $\pm$ 34.0	2.0	3.0	60 $\pm$ 34.0 ~ $\pm$ 300	3900 // 1.0	F15/12B
10G20D	10.700	8	6 $\pm$ 10.0	80 $\pm$ 30.0	2.0	3.5	80 $\pm$ 30.0 ~ $\pm$ 300	3900 // 1.0	F18/12P

## 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 ( $\Omega$ // pF)	Package Style
10G30A	10.700	2	3 $\pm$ 15.0	15 $\pm$ 50.0	0.5	1.5	30 +300 ~ +1000 35 -300 ~ -1000	5000 // 0	HC49/3L
10G30B	10.700	4	3 $\pm$ 15.0	30 $\pm$ 40.0	1.0	2.5	65 +300 ~ +1000 80 -250 ~ -1000	5000 // -1.0 ( $C_c=0.5\text{pF}$ )	HC49/3Lx2
10G30C	10.700	6	3 $\pm$ 15.0	60 $\pm$ 45.0	2.0	2.5	60 $\pm$ 45.0 ~ $\pm$ 300	5000 // -1.0	F15/12B
10G30D	10.700	8	6 $\pm$ 15.0	80 $\pm$ 40.0	2.0	3.0	80 $\pm$ 40.0 ~ $\pm$ 300	5000 // -1.0	F18/12P

- ◆ Operating temperature range of -20 to +70°C.
- ◆ Most HC49 models also available in HC49/T

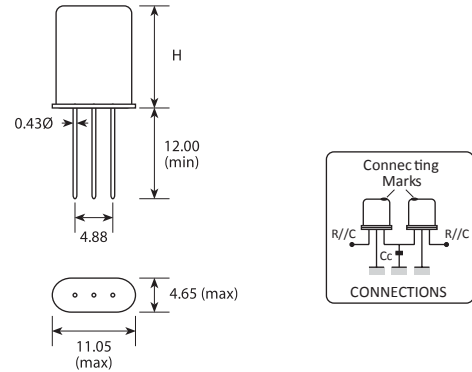
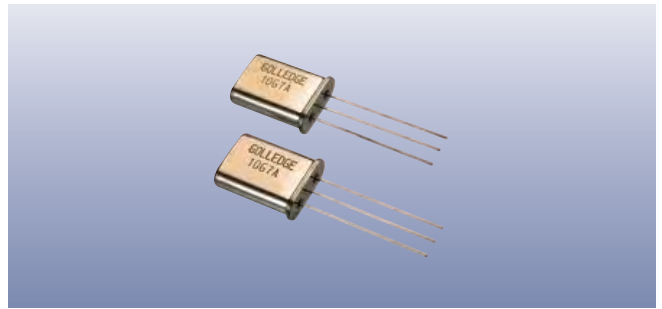
## UM-1/3L & UM-5/3L



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

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

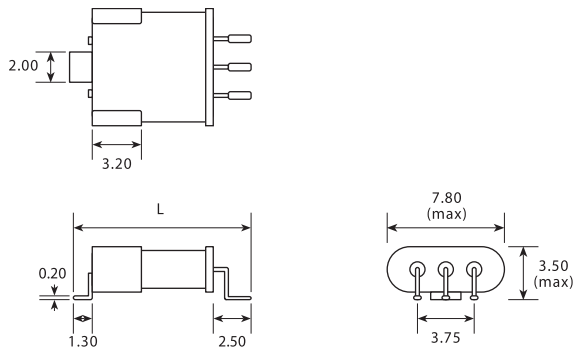
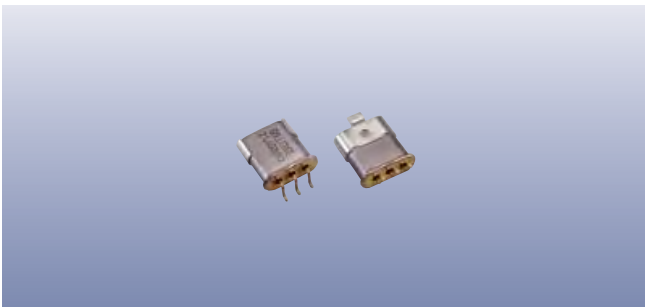
## HC49/3L & HC49T/3L



Package	Height H
HC49	13.46 max
HC49T	11.70 max

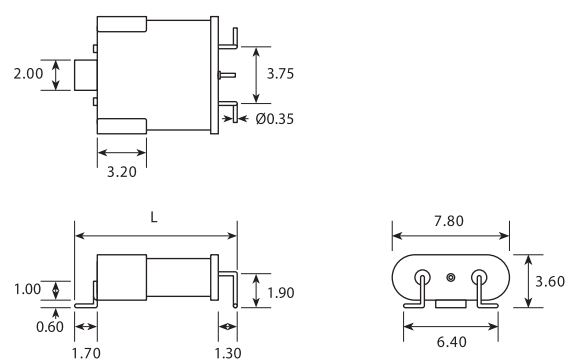
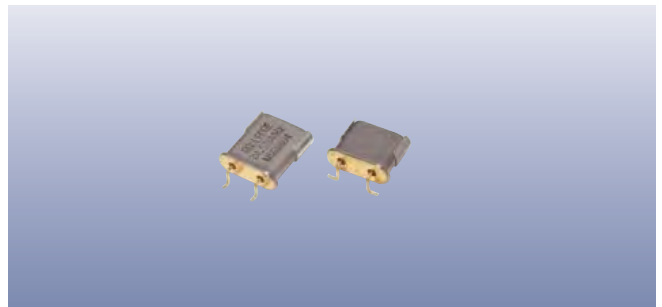
HC49/3Lx2 is a pair of HC49/3Ls connected as shown.

## UM-1JN/3L & UM-5JN/3L



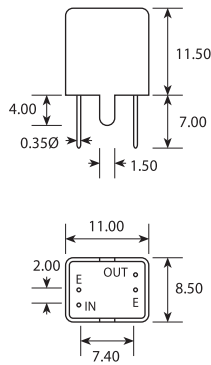
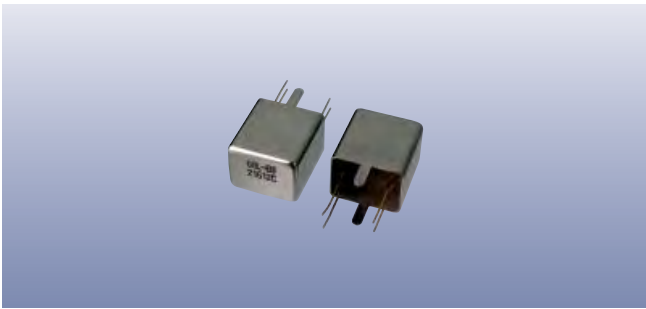
Package	Length L
UM-1JN/3L	12.50 max
UM-5JN/3L	10.50 max

## UM-1JC/3L & UM-5JC/3L

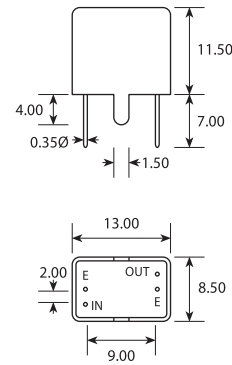
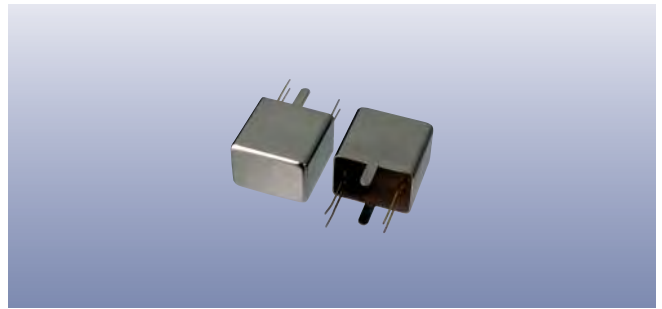


Package	Length L
UM-1JC/3L	11.10 max
UM-5JC/3L	9.00 max

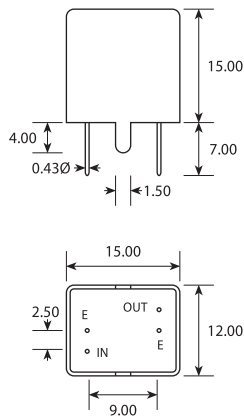
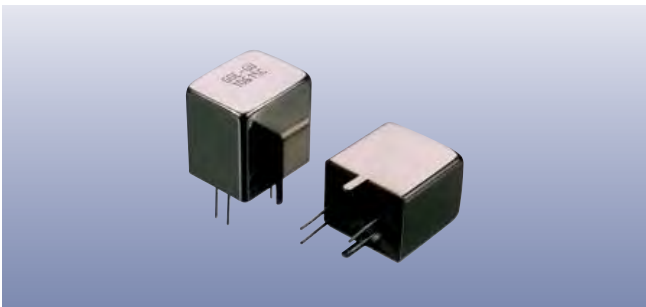
**F11/8A**



**F13/8A**



**F15/12B**



**F18/12P**

