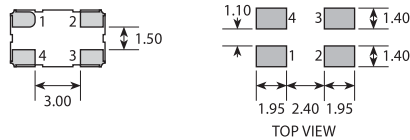


SOLDER PAD LAYOUT



PAD	CONNECTION
1	Ground
2	Out / In
3	Ground
4	In / Out

## Features

- Custom specifications available
- Miniature SM package

## Ordering Information

Product name + model number

eg: **GSF-61 21S20A**

**GSF-61 45S15A**

Option code X (eg GSF-61/X) denotes a custom spec.

- Available on T&R - 1k pcs per reel.
- Refer to our website for T&R and soldering details.

## Standard Specifications

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)	Operating Temperature Range ( $^{\circ}\text{C}$ )	No of Units
<b>21S7A</b>	21.400	2	3 $\pm 3.75$	18 $\pm 18.0$	1.0	1.5	50 -910 $\pm 10$	850 // 6.0	-20 to +70	1
<b>21S7B</b>	21.400	4	3 $\pm 3.75$	35 $\pm 14.0$	1.0	2.5	80 -910 $\pm 10$	850 // 3.5 ( $C_c=15.0\text{pF}$ )	-20 to +70	2
<b>21S12A</b>	21.400	2	3 $\pm 6.0$	18 $\pm 25.0$	1.0	1.5	50 -910 $\pm 10$	1200 // 3.0	-20 to +70	1
<b>21S12B</b>	21.400	4	3 $\pm 6.0$	35 $\pm 20.0$	1.0	2.5	80 -910 $\pm 10$	1200 // 1.5 ( $C_c=7.5\text{pF}$ )	-20 to +70	2
<b>21S15A</b>	21.400	2	3 $\pm 7.5$	15 $\pm 25.0$	1.0	1.5	50 -910 $\pm 10$	1500 // 2.0	-20 to +70	1
<b>21S15B</b>	21.400	4	3 $\pm 7.5$	35 $\pm 25.0$	1.0	2.5	80 -910 $\pm 10$	1500 // 0.5 ( $C_c=5.0\text{pF}$ )	-20 to +70	2
<b>21S20A</b>	21.400	2	3 $\pm 10.0$	15 $\pm 34.0$	1.0	2.0	50 -910 $\pm 10$	1800 // 0.5	-20 to +70	1
<b>21S20B</b>	21.400	4	3 $\pm 10.0$	35 $\pm 34.0$	1.0	2.5	80 -910 $\pm 10$	1800 // -1.0 ( $C_c=3.0\text{pF}$ )	-20 to +70	2
<b>21S30A</b>	21.400	2	3 $\pm 15.0$	15 $\pm 45.0$	1.0	1.5	50 -910 $\pm 10$	3000 // 0.0	-20 to +70	1
<b>21S30B</b>	21.400	4	3 $\pm 15.0$	35 $\pm 50.0$	1.0	2.5	80 -910 $\pm 10$	3000 // -1.5 ( $C_c=3.0\text{pF}$ )	-20 to +70	2
<b>45S7A</b>	45.000	2	3 $\pm 3.75$	10 $\pm 12.5$	1.0	2.5	65 -910 $\pm 10$	300 // 10.0	-20 to +70	1
<b>45S15A</b>	45.000	2	3 $\pm 7.5$	15 $\pm 25.0$	1.0	2.0	40 -910 $\pm 10$	650 // 4.5	-20 to +70	1
<b>45S20A</b>	45.000	2	3 $\pm 10.0$	15 $\pm 34.0$	1.0	2.0	40 -910 $\pm 10$	700 // 2.5	-20 to +70	1
<b>45S30A</b>	45.000	2	3 $\pm 15.0$	15 $\pm 50.0$	1.0	2.0	35 -910 $\pm 10$	800 // 1.5	-20 to +70	1

4-pole models are supplied as two matched units.