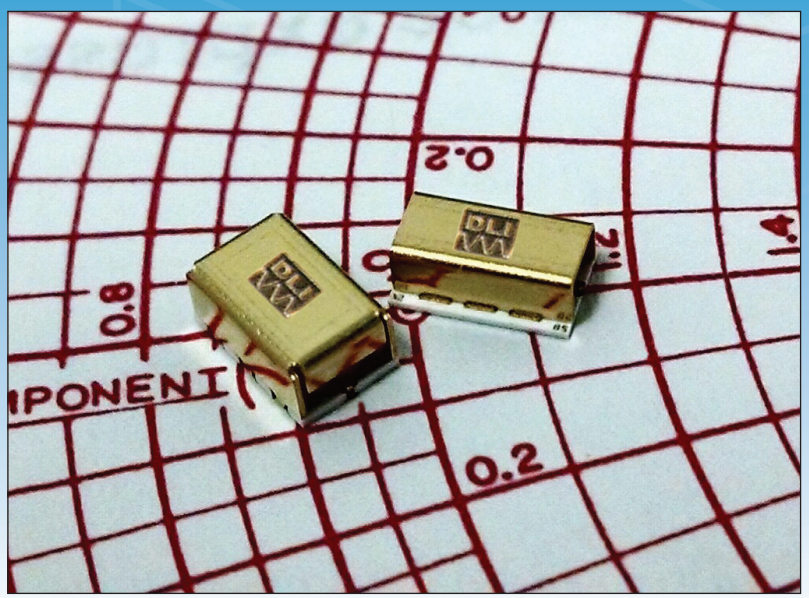
DLI DIELECTRIC LABORATORIES

Surface Mount Lowpass Filter Series



Description

DLI introduces its new high frequency surface mountable catalog lowpass filters. These LPF's incorporate DLI's high dielectric ceramic materials which provide small size and minimal performance variation over temperature. The catalog LPF's are offered in a variety of frequency bands, which offers a drop in solution for high frequency attenuation.

Features

- Small Size
- Fully Shielded Component
- Frequency Stable over Temperature
- Solder Surface Mountable
- Excellent Repeatability
- Operating Temp: -55˚C to +125˚C
- Characteristic Impedance: 50Ω
- 100% Tested and Inspected

Specification

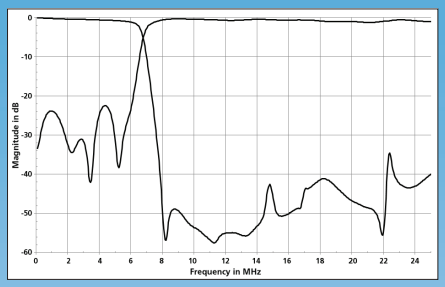
	L065XG9S	L095XG9S	L117XH4S	L128XH4S	L157XG3S	L204XF4S	L254XF3S
3 dB Cutoff	6.5 GHz	9.5 GHz	11.7 GHz	12.8 GHz	15.7 GHz	20.4 GHz	25.4 GHz
Passband	DC - 6 GHz	DC - 9 GHz	DC - 11 GHz	DC - 12 GHz	DC - 15 GHz	DC - 20 GHz	DC - 25 GHz
Max Insertion Loss in Passband	1.3 dB	1.3 dB	1 dB	1.2 dB	2.2 dB	1.8 dB	1.4 dB
Min VSWR in Passband	1.22:1	1.12:1	1.43:1	1.38:1	1.3:1	1.43:1	1.3:1
Min Rejection	7.9 - 22.4 GHz (35 dB)	11.5 - 32 GHz (30 dB)	17.6 - 30 GHz (40 dB)	18.8 - 32 GHz (40 dB)	19.9 - 32.2 GHz (40 dB)	23 - 43 GHz (30 dB)	29 - 50 GHz (30 dB)
Usable temp. Range	-55 to +125ºC	-55 to +125ºC	-55 to +125ºC	-55 to +125ºC	-55 to +125ºC	-55 to +125ºC	-55 to +125ºC
Length - Inches (mm)	0.220 (5.58)	0.220 (5.58)	0.220 (5.58)	0.220 (5.58)	0.220 (5.58)	0.220 (5.58)	0.220 (5.58)
Width - Inches (mm)	0.180 (4.57)	0.140 (3.56)	0.140 (3.56)	0.140 (3.56)	0.140 (3.56)	0.140 (3.56)	0.140 (3.56)
Height - Inches (mm)	0.103 (2.62)	0.103 (2.62)	0.103 (2.62)	0.103 (2.62)	0.103 (2.62)	0.078 (1.98)	0.078 (1.98)

knowles®

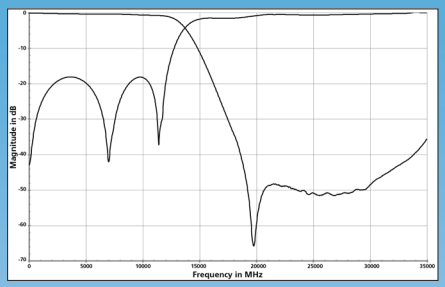
www.knowlescapacitors.com

Typical Measured Performance

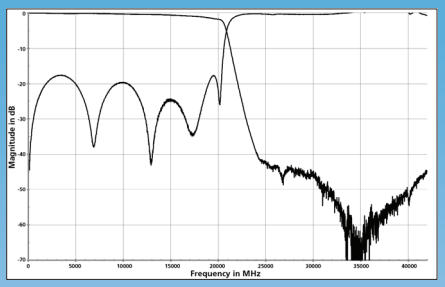
L065XG9S - 6.5 GHz



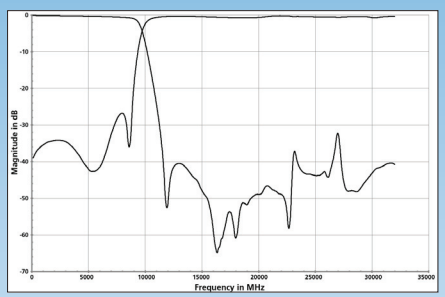
L128XH4S - 12.8 GHz



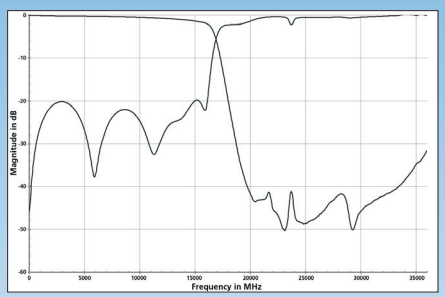
L204XF4S - 20.4 GHz



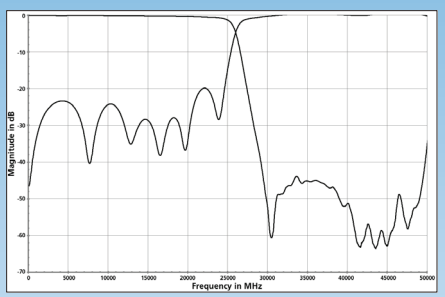
L095XG9S - 9.5 GHz



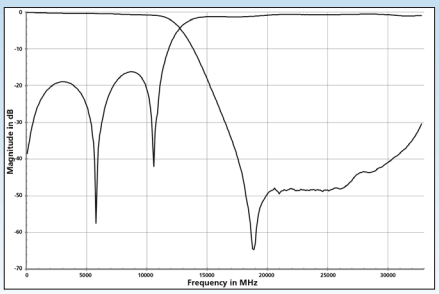
L157XG3S - 15.7 GHz



L254XF3S - 25.4 GHz



L117XH4S - 11.7 GHz



Mounting Information

PCB ground pattern length and width can be 0.002-0.003 inches larger than filter footprint. Dimensions of filter launch and PCB launch pattern should be closely matched. It is suggested that PCB ground metal be pulled back from RF I/O trace to account for component alignment tolerance. Ground via depth and spacing should be set so as not to create any resonances at the frequency of operation.

Reference SMT Filter Mounting application note for additional mounting information.

Individual footprint diagrams of all Filters are available upon request from the DLI Sales Office.

Qualifications

ISO 9001 QMI-SAI Global

AS 9100 QMI-SAI Global

RoHS 2011/65/EU Lead Free

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