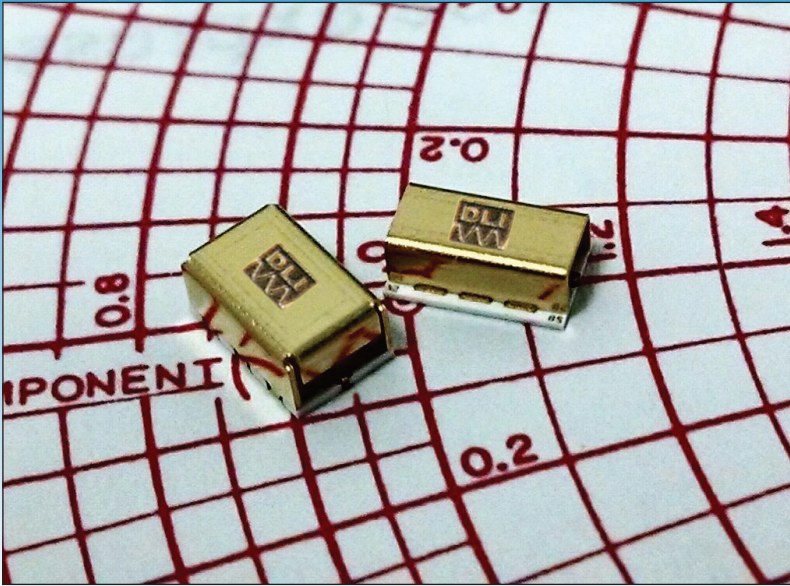


Surface Mount Lowpass Filter Series



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

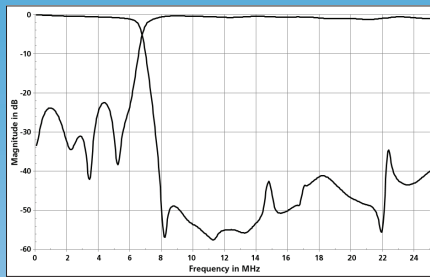
Specification

	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 +125°C	-55 to +125°C	-55 to +125°C	-55 to +125°C	-55 to +125°C	-55 to +125°C	-55 to +125°C
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)

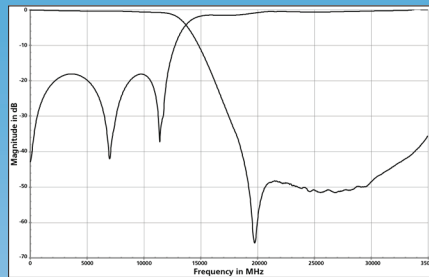


Typical Measured Performance

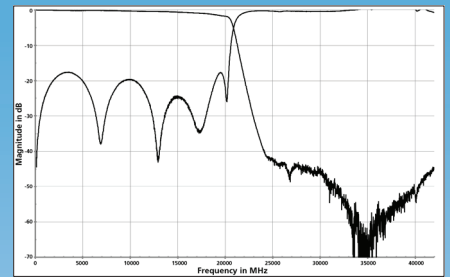
L065XG9S - 6.5 GHz



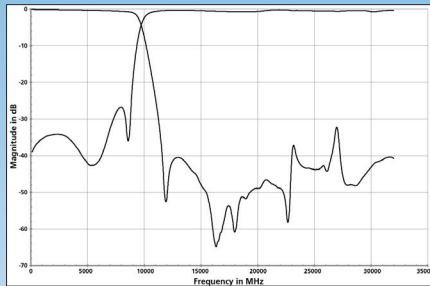
L128XH4S - 12.8 GHz



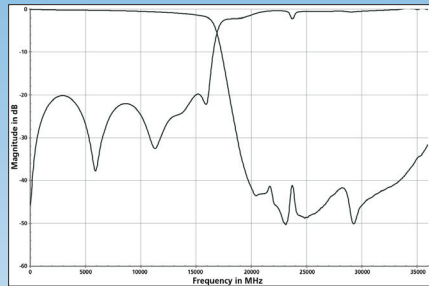
L204XF4S - 20.4 GHz



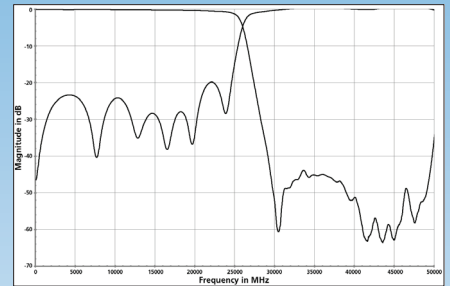
L095XG9S - 9.5 GHz



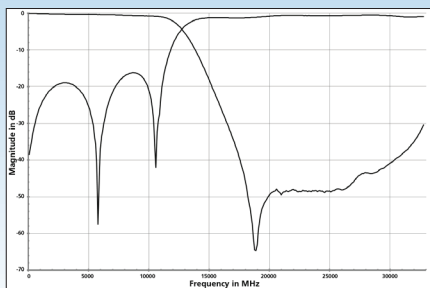
L157XG3S - 15.7 GHz



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



Dielectric Laboratories, Inc
2777 Route 20 East, Cazenovia,
NY 13035 USA



Phone: +1 315 655 8710
Fax: +1 315 655 0445
Email: sales@dilabs.com



Novacap
25111 Anza Drive, Valencia,
CA 91355 USA



Phone: +1 661 295 5920
Fax: +1 661 295 5928
Email: info@novacap.com



Syfer Technology Limited
Old Stoke Road, Arminghall, Norwich,
NR14 8SQ UK



Phone: +44 1603 723300
Fax: +44 1603 723301
Email: sales@syfer.co.uk



Voltronics Corporation
2250 Northwood Drive, Salisbury,
MD 21801 USA



Phone: +1 410 749 2424
Fax: +1 443 260 2263
Email: info@voltronicscorp.com