

Surface Mount Low Pass Filter

SXLP-400+

50Ω DC to 400 MHz

The Big Deal

- Low Insertion Loss (0.7 dB typical)
- High rejection (60 dB typical)
- Good VSWR (1.36:1 typical)
- Miniature shielded package



CASE STYLE: HF1139

Product Overview

SXLP-400+ is a lowpass filter fabricated using SMT technology. Covering up to 400 MHz, these units offer low insertion loss, good matching within the passband and high rejection. This model also offers flat group delay characteristics. This unit uses a miniature high Q capacitors and wire welded inductors for high reliability. In addition it has repeatable performance across production lots and consistent performance across temperature.

Key Features

Feature	Advantages
Wide rejection up to 6000 MHz	This enables the filter to attenuate spurious signals and reject harmonics over a broad band of frequency.
Good VSWR, 1.36:1 typical over Passband	The model has very good return loss which provides good matching when used with other devices.
Sharp roll off shape factor, 1.2	Sharp shape factor helps in adjacent channel rejection and hence increased selectivity.
Small size, 0.44" x 0.74" x 0.27"	The small surface mount package enables the SXLP-400+ to be used in compact designs.



For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

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SXLP-400+

50Ω DC to 400 MHz



CASE STYLE: HF1139
PRICE: \$11.45 ea. QTY (1-9)

Features

- Flat group delay over passband
- Good VSWR, 1.36:1 typical over passband
- High rejection, 60 dB typical
- Shielded case
- Aqueous washable

Applications

- Test equipment
- Receivers/transmitters
- Harmonic rejection
- Military

Electrical Specifications at 25°C

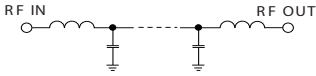
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC - 400	—	0.7	1.5	dB
	Freq. Cut-Off	F2	435	—	3.5	—	dB
	VSWR	DC-F1	DC - 400	—	1.36	—	:1
Stop Band	Rejection Loss	F3-F4	500 - 2400	20	27	—	dB
	VSWR	F3-F4	500 - 2400	—	20	—	:1

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1W max.

Permanent damage may occur if any of these limits are exceeded.

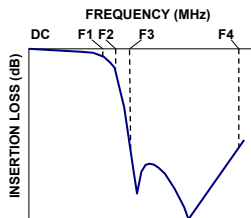
Functional Schematic



Typical Performance Data at 25°C

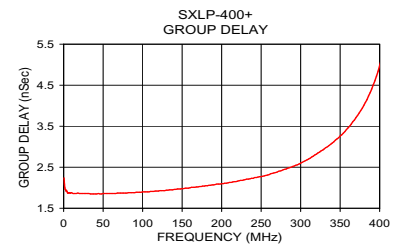
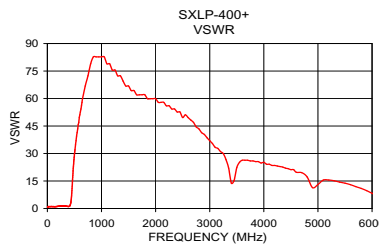
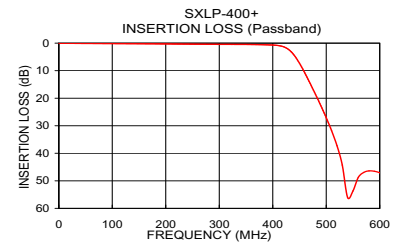
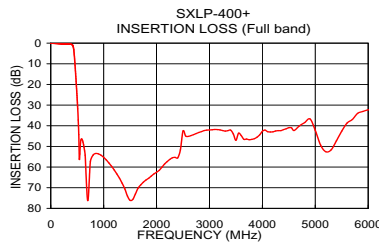
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
0.5	0.03	1.01	0.5	2.24
26.0	0.08	1.03	20.0	1.86
100.0	0.16	1.05	40.0	1.85
220.0	0.32	1.20	80.0	1.87
360.0	0.50	1.15	100.0	1.90
400.0	0.69	1.11	120.0	1.92
422.0	1.47	1.87	130.0	1.94
435.0	3.27	3.49	140.0	1.96
448.0	6.72	7.25	160.0	2.00
464.0	12.43	15.00	200.0	2.10
484.0	20.36	24.14	220.0	2.16
500.0	27.18	29.46	240.0	2.23
550.0	53.70	41.37	280.0	2.45
700.0	81.04	66.82	290.0	2.52
1000.0	55.96	82.73	300.0	2.60
1500.0	75.12	66.82	320.0	2.82
1750.0	67.54	62.05	340.0	3.09
2000.0	62.91	59.91	360.0	3.46
2200.0	57.66	56.04	380.0	4.01
2400.0	55.66	52.65	400.0	4.98

Typical Frequency Response



+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.



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