

Low Pass Filter

SXLP-36+

50Ω DC to 36 MHz

Maximum Ratings

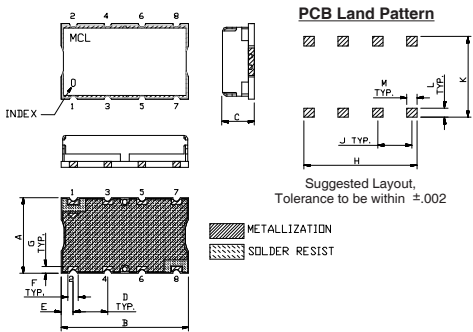
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

Pin Connections

INPUT	1
OUTPUT	8
GROUND	2, 3, 4, 5, 6, 7

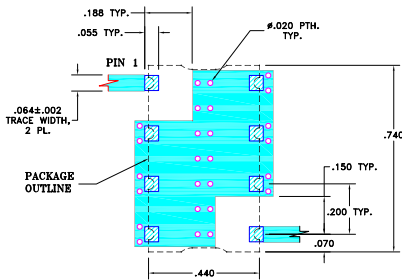
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.44	.74	.27	.200	.07	.060	
11.18	18.80	6.86	5.08	1.78	1.52	
G	H	J	K	L	M	wt.
.040	.660	.200	.470	.055	.060	grams
1.02	16.76	5.08	11.94	1.40	1.52	3.0

Demo Board MCL P/N: TB-368 Suggested PCB Layout (PL-230)



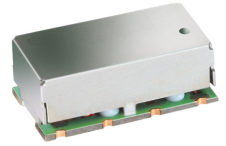
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- high rejection
- sharp cut-off
- shielded package
- aqueous washable
- low cost

Applications

- defense communications
- receivers / transmitters
- harmonic rejection



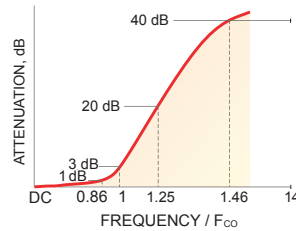
CASE STYLE: HF1139

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

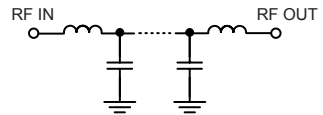
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 36	40	50 - 57	57 - 560	1.3	18

Typical Frequency Response

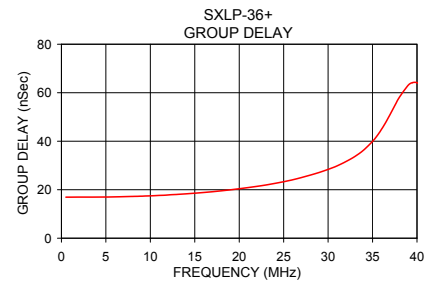
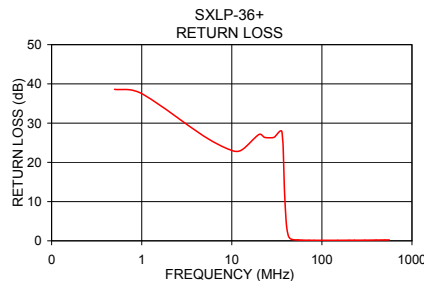
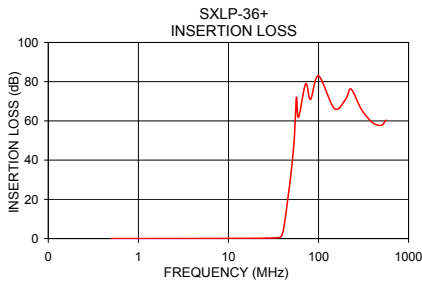


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
0.5	0.01	0.00	38.73	0.5	16.94
1.5	0.02	0.00	35.43	2.0	16.96
4.0	0.04	0.00	28.46	8.0	17.22
10.0	0.08	0.01	23.57	9.0	17.33
23.0	0.16	0.01	31.50	9.5	17.40
32.0	0.32	0.01	27.33	10.0	17.47
36.0	0.49	0.02	32.45	10.5	17.53
38.0	0.83	0.03	15.45	11.0	17.66
39.2	1.67	0.03	8.33	11.5	17.71
40.0	2.82	0.04	5.25	12.0	17.83
41.2	5.62	0.09	2.52	13.0	18.05
43.0	11.31	0.14	0.95	15.0	18.56
50.0	35.26	0.24	0.24	17.0	19.17
57.0	69.51	0.35	0.17	19.0	19.94
70.0	77.58	1.45	0.14	21.0	20.88
80.0	71.16	0.51	0.14	28.0	26.02
100.0	81.24	2.26	0.13	30.0	28.38
200.0	71.49	0.73	0.15	33.0	33.67
400.0	58.81	0.40	0.19	36.0	44.87
560.0	59.94	0.75	0.23	40.0	64.14



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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