

Low Pass Filter

50Ω DC to 27 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.

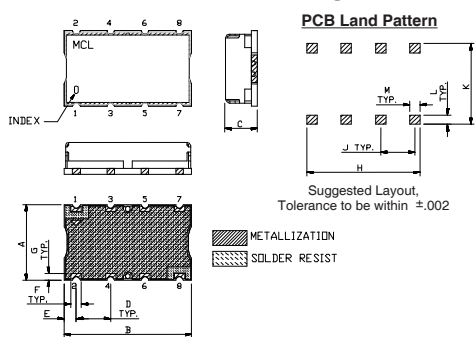
Pin Connections

INPUT 1

OUTPUT 8

GROUND 2, 3, 4, 5, 6, 7

Outline Drawing



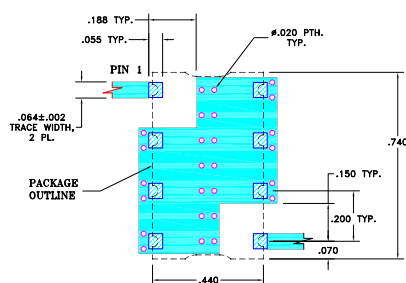
Outline Dimensions (inch/mm)

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

Note: Please refer to case style drawing for details

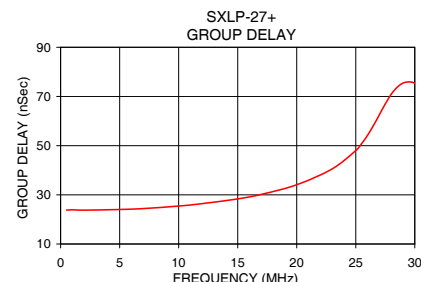
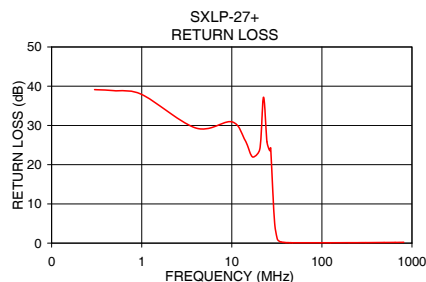
Demo Board MCL P/N: TB-368

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

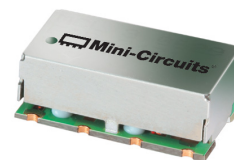


Notes

- 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.
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SXLP-27+



Generic photo used for illustration purposes only
CASE STYLE: HF1139

+RoHS Compliant

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

Features

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

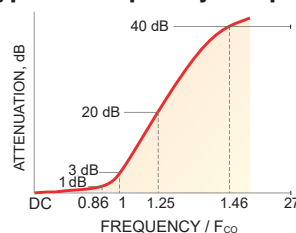
Applications

- defense communications
- receivers / transmitters
- harmonic rejection

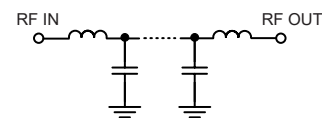
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)	VSWR (:1)
(Loss < 1dB)	(Loss 3dB)	(Loss > 20dB) (Loss > 40dB)	Passband Typ. Stopband Typ.
DC - 27	30	36 - 41 41 - 810	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	0.00	0.00	0.5	23.80
1.0	0.01	0.00	2.0	23.78
1.5	0.02	0.00	5.0	24.04
3.0	0.04	0.00	7.0	24.39
7.0	0.08	0.01	10.0	25.45
15.0	0.17	0.01	12.0	26.41
23.0	0.32	0.01	15.0	28.35
27.0	0.55	0.01	17.0	30.18
28.9	1.28	0.07	20.0	34.09
30.0	3.15	0.13	23.0	40.53
31.0	6.33	0.16	25.0	48.01
32.5	12.43	0.16	25.5	50.83
36.0	26.64	0.18	25.8	52.81
41.0	45.57	0.27	26.0	54.23
80.0	64.39	0.30	26.4	57.35
200.0	65.04	0.51	27.0	62.56
300.0	59.41	0.29	27.6	67.79
400.0	56.49	0.33	28.5	73.71
600.0	55.04	0.38	29.0	75.44
810.0	58.04	1.22	30.0	75.29

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