

# Low Pass Filter

## SXLP-27+

50Ω DC to 27 MHz

### Maximum Ratings

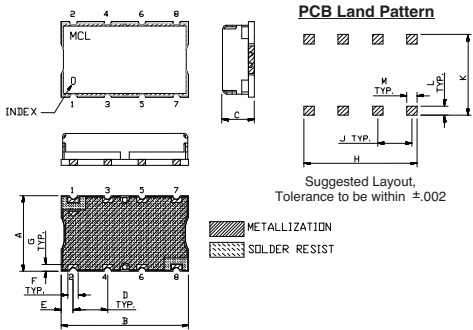
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

### Pin Connections

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

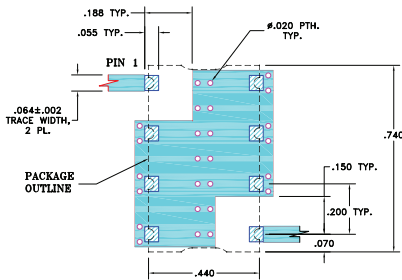
### Outline Drawing



### 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

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



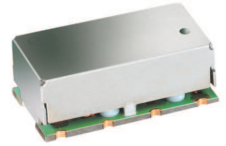
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - DENOTES COPPER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



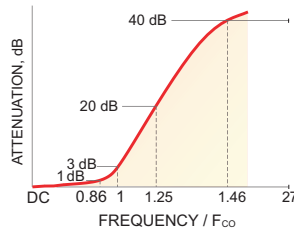
CASE STYLE: HF1139  
PRICE: \$ 8.95 ea. QTY (1-9)

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

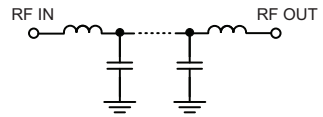
### Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 27	30	36 - 41	41 - 810	1.3	18

### Typical Frequency Response

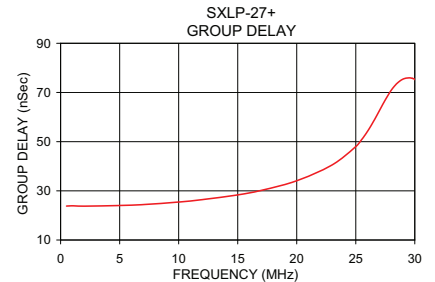
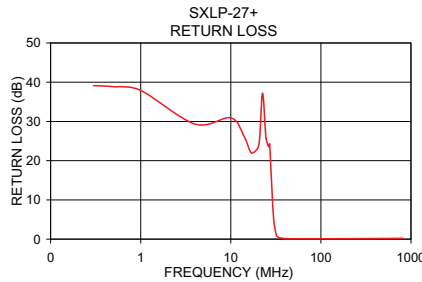
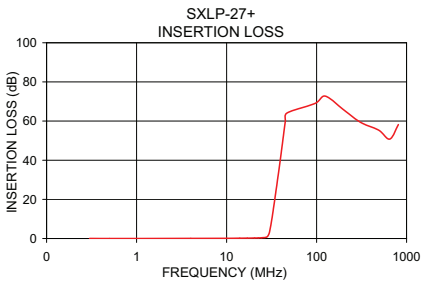


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
0.5	0.00	0.00	38.86	0.5	23.80
1.0	0.01	0.00	37.89	2.0	23.78
1.5	0.02	0.00	35.59	5.0	24.04
3.0	0.04	0.00	31.20	7.0	24.39
7.0	0.08	0.01	27.72	10.0	25.45
15.0	0.17	0.01	24.32	12.0	26.41
23.0	0.32	0.01	45.71	15.0	28.35
27.0	0.55	0.01	24.25	17.0	30.18
28.9	1.28	0.07	10.64	20.0	34.09
30.0	3.15	0.13	4.83	23.0	40.53
31.0	6.33	0.16	2.21	25.0	48.01
32.5	12.43	0.16	0.80	25.5	50.83
36.0	26.64	0.18	0.24	25.8	52.81
41.0	45.57	0.27	0.14	26.0	54.23
80.0	64.39	0.30	0.09	26.4	57.35
200.0	65.04	0.51	0.12	27.0	62.56
300.0	59.41	0.29	0.13	27.6	67.79
400.0	56.49	0.33	0.15	28.5	73.71
600.0	55.04	0.38	0.18	29.0	75.44
810.0	58.04	1.22	0.21	30.0	75.29



For detailed performance specs & shopping online see web site

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Page 1 of 1