

Low Pass Filter

SXLP-135+

50Ω DC to 135 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.

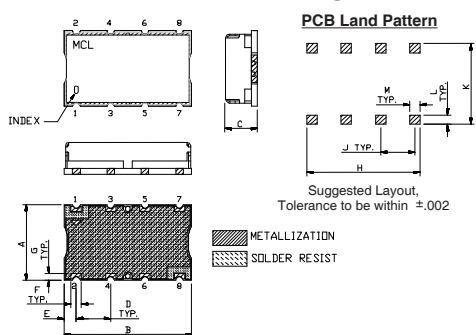
Pin Connections

INPUT 1

OUTPUT 8

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

Outline Drawing

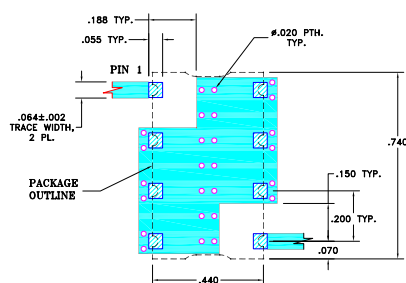


Outline Dimensions (inch mm)

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:

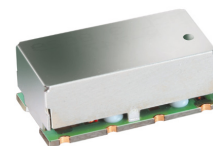
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 DENOTES COPPER LAND PATTERN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

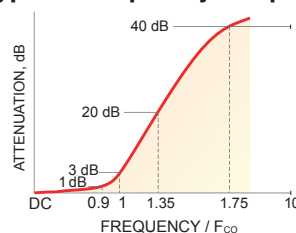
+RoHS Compliant

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

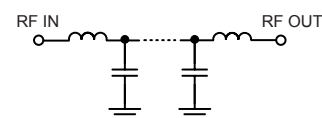
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 1dB)	(Loss > 3dB)	(Loss > 20dB)	(Loss > 40dB)
DC - 135	155	210 - 300	300 - 1600	1.3	18

Typical Frequency Response

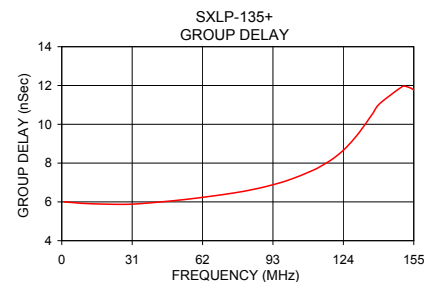
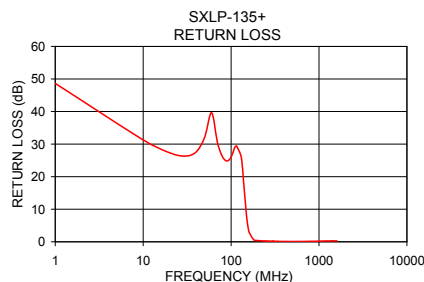
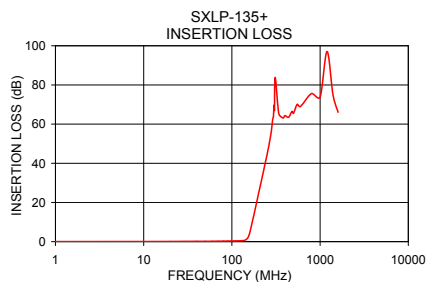


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	σ			
1.0	0.02	0.00	48.64	1.0	6.00
10.0	0.07	0.00	31.28	10.0	5.92
30.0	0.14	0.01	26.33	20.0	5.88
90.0	0.29	0.01	24.81	30.0	5.88
135.0	0.53	0.01	22.58	40.0	5.96
150.0	1.66	0.08	7.91	50.0	6.07
155.0	2.98	0.16	4.92	60.0	6.20
160.0	4.95	0.25	2.97	70.0	6.36
180.0	15.25	0.53	0.69	80.0	6.54
210.0	29.11	0.75	0.34	90.0	6.79
280.0	56.34	2.26	0.18	100.0	7.13
300.0	66.63	5.05	0.16	110.0	7.60
400.0	64.93	2.59	0.09	115.0	7.90
600.0	70.93	3.59	0.10	120.0	8.28
800.0	79.87	3.41	0.15	130.0	9.43
1000.0	79.15	5.76	0.19	135.0	10.24
1200.0	83.19	8.67	0.24	140.0	11.06
1400.0	75.49	3.01	0.27	150.0	11.95
1600.0	66.38	2.01	0.28	155.0	11.77



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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