

Low Pass Filter

50Ω DC to 700 MHz

Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

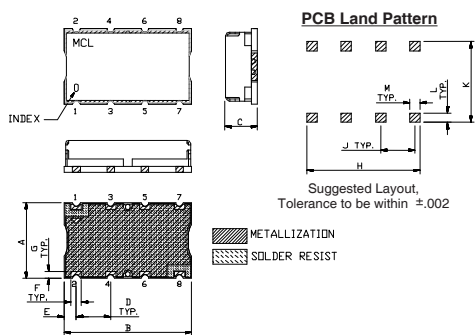
RF Power Input 0.5W Max.

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

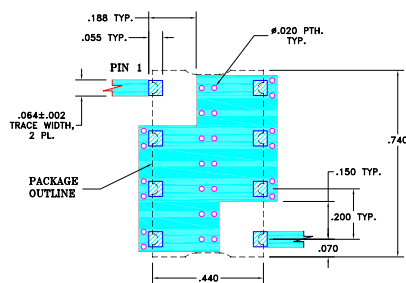


Outline Dimensions (inch mm)

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

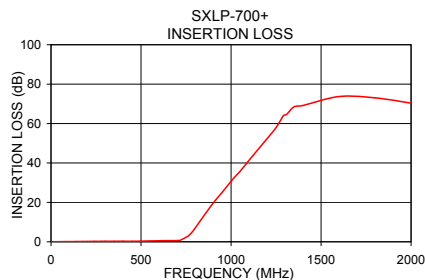
Demo Board MCL P/N: TB-368

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.
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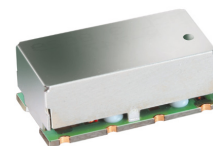


Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection



CASE STYLE: HF1139

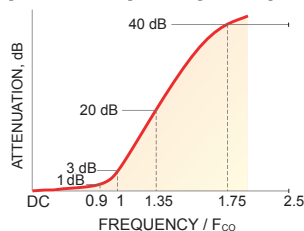
+RoHS Compliant

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

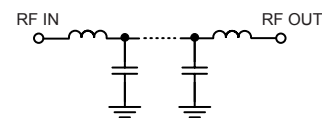
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)	VSWR (:1)	
(Loss < 1dB)	(Loss 3dB)	(Loss > 20dB)	(Loss > 40dB)	
DC - 700	770	1000 - 1300	1300 - 2000	
		Passband Typ.	Stopband Typ.	
		1.7	18	

Typical Frequency Response

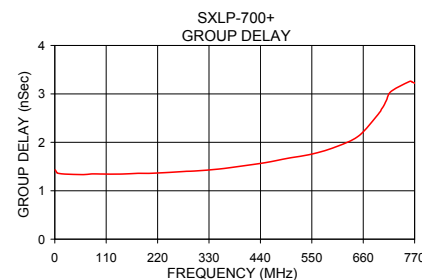
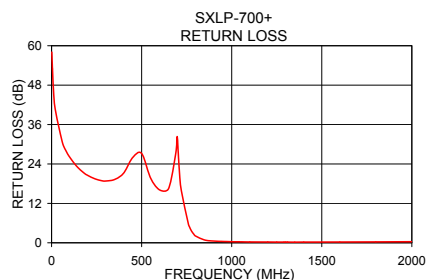


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
$\bar{x}$	σ			
1.0	0.01	0.00	1.0	1.43
60.0	0.07	0.00	10.0	1.36
100.0	0.09	0.00	20.0	1.35
200.0	0.17	0.01	60.0	1.33
500.0	0.32	0.01	80.0	1.35
700.0	0.62	0.01	100.0	1.35
720.0	0.79	0.04	140.0	1.34
760.0	2.53	0.15	200.0	1.36
770.0	3.28	0.17	240.0	1.38
800.0	6.51	0.25	300.0	1.41
850.0	13.04	0.26	350.0	1.45
900.0	19.36	0.29	400.0	1.51
1000.0	30.63	0.31	450.0	1.58
1100.0	41.29	0.35	500.0	1.67
1200.0	52.82	0.82	550.0	1.76
1300.0	64.91	2.02	600.0	1.90
1400.0	69.54	4.11	650.0	2.13
1600.0	70.63	4.33	700.0	2.70
1800.0	74.93	3.28	720.0	3.05
2000.0	71.30	1.17	770.0	3.22



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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