

Low Pass Filter

50Ω DC to 90 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.

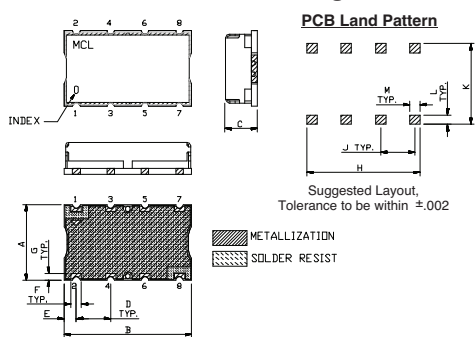
Pin Connections

INPUT 1

OUTPUT 8

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

Outline Drawing

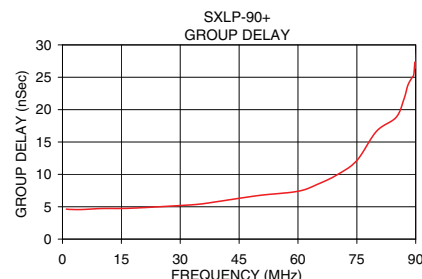
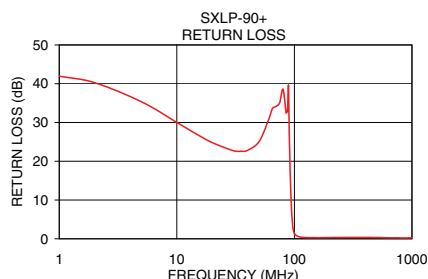
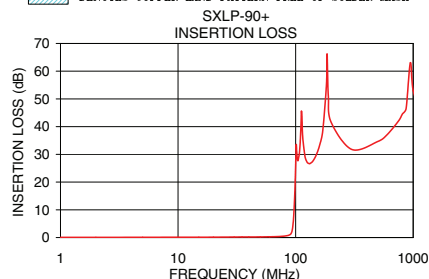
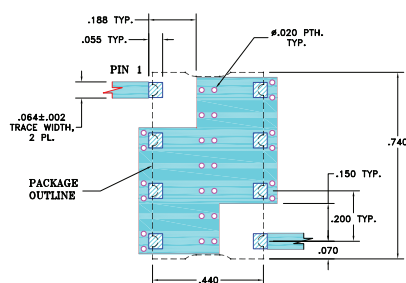


Outline Dimensions (inch mm)

	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
	.040	.660	.200	.470	.055	.060
	1.02	16.76	5.08	11.94	1.40	1.52
						grams
						3.0

Demo Board MCL P/N: TB-368

Suggested PCB Layout (PL-230)

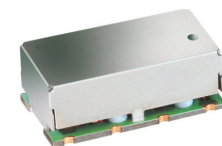


Features

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

Applications

- test equipments
- defense communications
- receivers / transmitters
- harmonic rejection



CASE STYLE: HF1139
PRICE: \$11.45 ea. QTY (1-9)

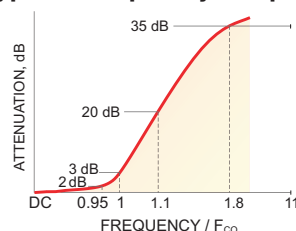
+RoHS Compliant

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

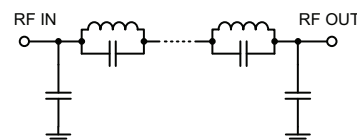
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 35dB Typ.)	Passband Typ.	Stopband Typ.
DC - 90	94	105 - 170	170 - 1000	1.2	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	0.03	0.02	41.95	1.0	4.63
5.0	0.06	0.02	35.35	2.0	4.63
20.0	0.11	0.02	24.82	5.0	4.58
50.0	0.21	0.02	25.05	10.0	4.57
75.0	0.40	0.02	35.12	15.0	4.73
85.0	0.66	0.02	32.46	20.0	4.74
90.0	1.08	0.02	31.00	30.0	4.84
93.0	2.09	0.12	13.12	40.0	5.41
94.0	2.96	0.19	9.38	50.0	5.84
95.0	4.40	0.29	6.45	60.0	6.74
97.0	9.70	0.44	2.99	65.0	7.39
99.0	18.72	0.68	1.69	70.0	8.47
100.0	25.21	0.94	1.38	75.0	9.94
105.0	27.65	0.93	0.76	80.0	12.14
170.0	36.96	1.75	0.30	85.0	16.65
300.0	31.73	0.23	0.35	87.0	18.81
500.0	34.60	0.18	0.33	89.0	23.75
945.0	58.72	2.92	0.24	89.5	24.88
1000.0	51.39	1.46	0.28	90.0	27.29

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Page 1 of 1