

Low Pass Filter

50Ω DC to 470 MHz

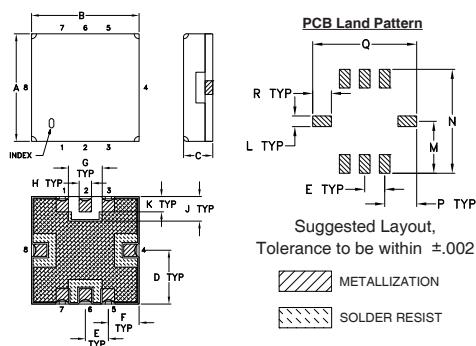
Maximum Ratings

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

RF IN	2
RF OUT	6
GROUND	1, 3, 4, 5, 7, 8

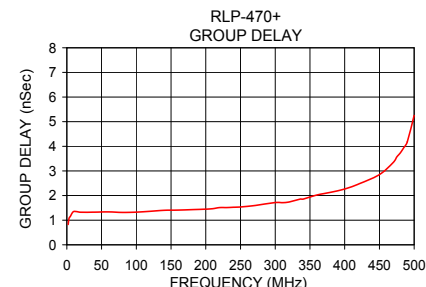
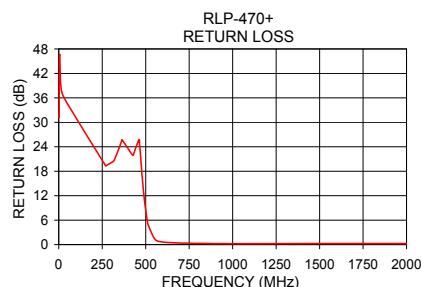
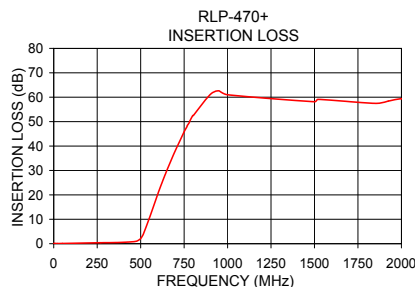
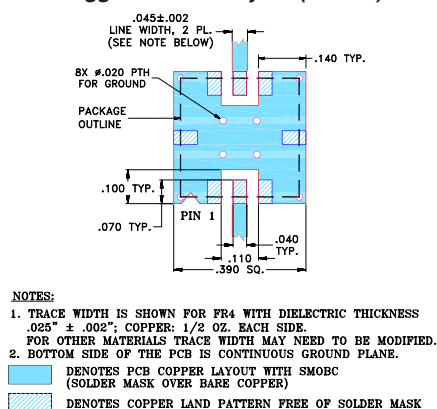
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.080
8.89	8.89	2.54	4.45	1.93	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R	wt.	
.050	.040	.195	.390	.120	.390	.070	grams	
1.27	1.02	4.95	9.91	3.05	9.91	1.78	0.25	

Demo Board MCL P/N: TB-332 Suggested PCB Layout (PL-176)



Notes

- A. 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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



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Features

- high rejection
- sharp insertion loss roll off
- excellent VSWR, 1.15:1 typ. @ passband
- aqueous washable

Applications

- wireless communications
- receivers / transmitters



CASE STYLE: GP731

+RoHS Compliant

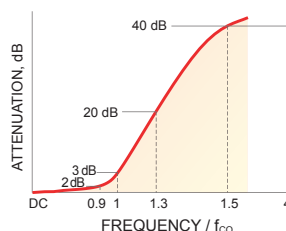
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Reel Size	Devices/Reel
7"	10, 20, 50, 100, 200
13"	500, 1000

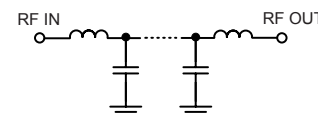
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)	VSWR (:1)
(Loss < 2dB)	(Loss 3dB)	(Loss > 20dB) (Loss > 40dB)	Passband Typ. Stopband Typ.
DC - 470	510	650 - 780 780 - 2000	1.15 20

Typical Frequency Response



Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB) $\bar{x}$	σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
0.5	0.11	0.02	42.90	2.0	0.83
50.0	0.10	0.01	34.55	5.0	1.15
270.0	0.40	0.01	19.30	10.0	1.35
425.0	0.67	0.01	21.95	40.0	1.33
470.0	0.94	0.03	22.09	80.0	1.32
500.0	2.14	0.15	8.44	100.0	1.33
510.0	3.18	0.22	5.76	140.0	1.40
515.0	3.82	0.26	4.76	160.0	1.41
553.0	11.00	0.42	1.32	200.0	1.45
594.0	19.44	0.42	0.67	220.0	1.51
650.0	29.87	0.42	0.47	250.0	1.54
690.0	36.62	0.44	0.39	270.0	1.59
780.0	49.62	0.73	0.29	320.0	1.74
800.0	52.53	1.16	0.29	360.0	2.02
1000.0	61.01	2.97	0.20	400.0	2.27
1500.0	58.15	3.69	0.26	420.0	2.47
1850.0	57.47	2.55	0.26	470.0	3.35
2000.0	59.38	4.12	0.25	500.0	5.25