Surface Mount

Bandpass Filter

BPF-A800+

50Ω 795 to 805 MHz



CASE STYLE: HQ1157

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W at 25°C

*Passband rating, derate linearly to 0.25W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Pin Connections

RF IN	1
RF OUT	8
GROUND	2,3,4,5,6,7,9,10,11,12,13,14

Features

- Linear phase, up to ±0.3 deg typ @ Fc ± 7.5 MHz
- Good VSWR, 1.3:1 typ @ passband
- High rejection
- Shielded case
- Aqueous washable

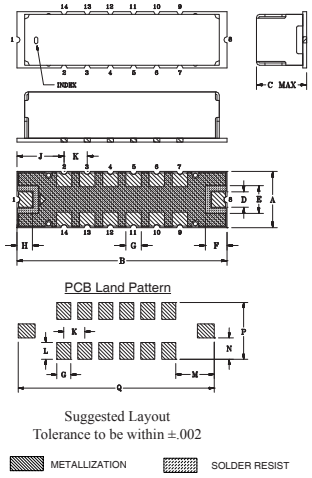
Applications

- Military radio
- Harmonic rejection
- Transmitters/receivers

+RoHS Compliant

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

Outline Drawing

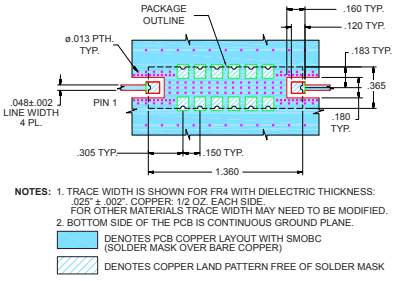


Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H
.365	1.360	.35	.100	.180	.140	.100	.100
9.27	34.54	8.89	2.54	4.57	3.58	2.54	2.54

J	K	L	M	N	P	Q	wt.
.305	.150	.120	.275	.152	.405	1.400	grams
7.75	3.81	3.05	6.99	3.87	10.29	35.65	4.0

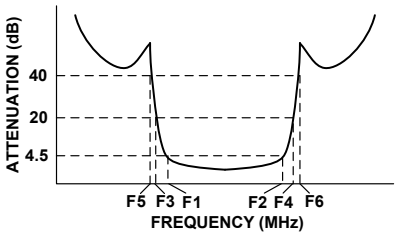
Demo Board MCL P/N: TB-363+
Suggested PCB Layout (PL-227)



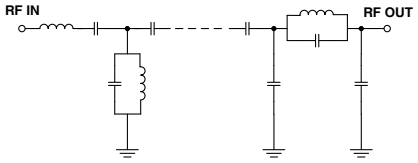
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)		
	(Loss < 4.5dB)	Loss > 20dB		Loss > 40dB			Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 7.5MHz	Typ.	Max.	Typ.
800	795 - 805	700	900	660	1000-2500	±1	1.3	1.8	20

Typical Frequency Response

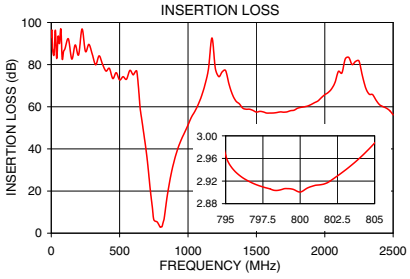


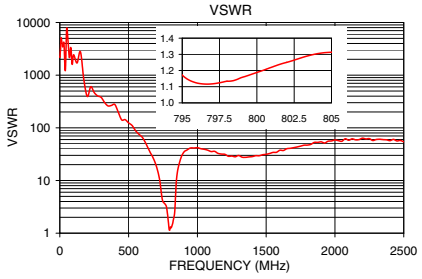
Functional Schematic

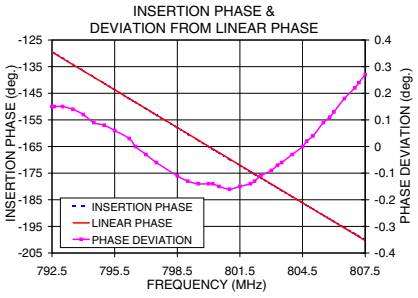


Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg.)
0.5	92.80	2173.44	792.5	0.15
300	84.93	379.70	793.0	0.15
660	54.83	32.89	793.5	0.14
700	35.84	19.27	794.0	0.12
725	20.14	10.67	795.0	0.08
740	11.89	5.27	796.0	0.05
775	5.28	3.17	797.0	-0.03
795	2.97	1.17	798.0	-0.06
798	2.91	1.13	799.0	-0.13
800	2.90	1.19	800.0	-0.14
802	2.92	1.25	801.0	-0.16
805	2.99	1.31	802.0	-0.14
820	5.55	1.53	803.0	-0.09
835	11.43	2.52	803.5	-0.06
850	18.46	11.66	804.0	-0.03
900	34.54	34.18	805.0	0.04
1000	51.34	42.01	806.0	0.13
2500	56.18	54.41	807.5	0.27







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-Circuit's applicable established test performance criteria and measurement instructions.

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