Surface Mount

Bandpass Filter

BPF-A800+

50Ω 795 to 805 MHz

CASE STYLE: HQ1157
PRICE: $29.95 ea. QTY (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Maximum Ratings

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

*Passband rating, derate linearly to 0.25W at 100°C ambient.

Pin Connections

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

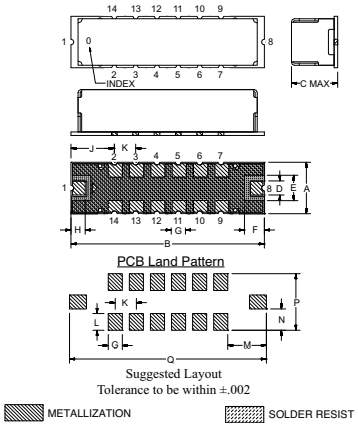
Features

- 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

Outline Drawing

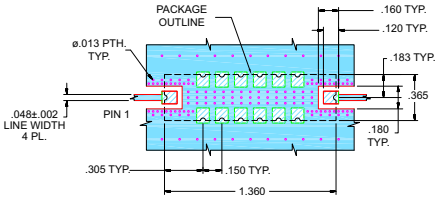


Outline Dimensions (inch / mm)

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)



NOTES: 1. 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.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

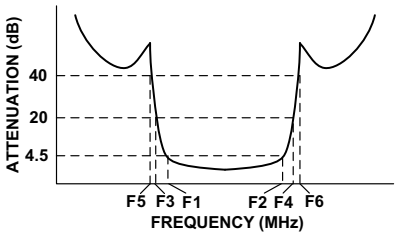
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

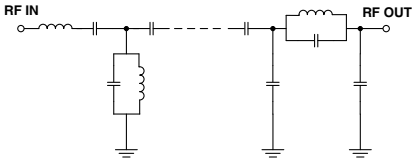
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

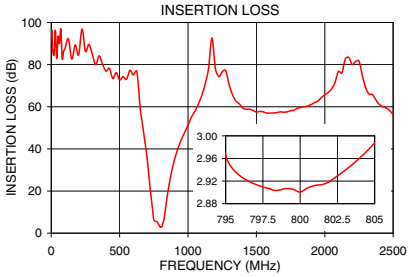
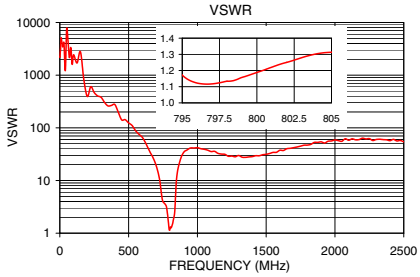
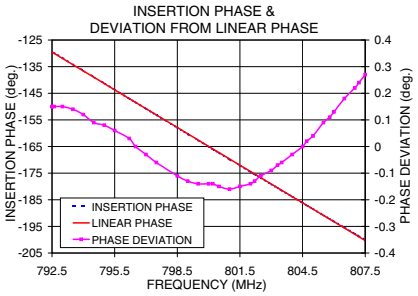
CENTER FREQ. (MHz)	PASSBAND (MHz)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)		
	(Loss < 4.5dB)	Loss > 20dB		Loss > 40dB			Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 7.5MHz	Typ.	Max.	Typ.
800	795 - 805	700	900	660	1000-2500	±1	1.3	1.8	20

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