Surface Mount

Bandpass Filter

BPF-A328+

50Ω 327 to 329 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 ±3 deg typ @ Fc ± 7.5 MHz
- Good VSWR, 1.2:1 typ @ passband
- High rejection
- Shielded case
- Aqueous washable

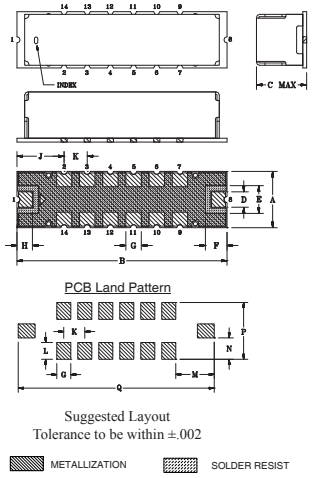
+RoHS Compliant

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

Applications

- Military radio
- Harmonic rejection
- Transmitters/receivers

Outline Drawing

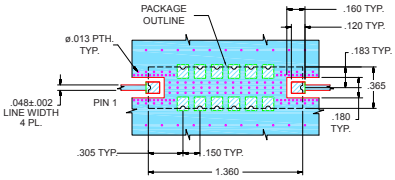


Outline Dimensions (inch / mm)

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.

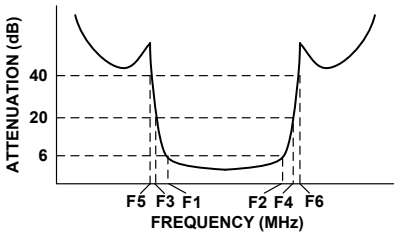
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

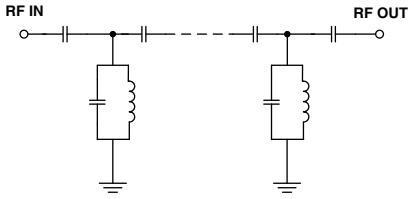
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)		
	(Loss < 6dB)	Loss > 20dB		Loss > 40dB			Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 7.5MHz	Typ.	Max.	Typ.
328	327 - 329	305	350	300	370-2000	±6	1.2	1.7	20

Typical Frequency Response

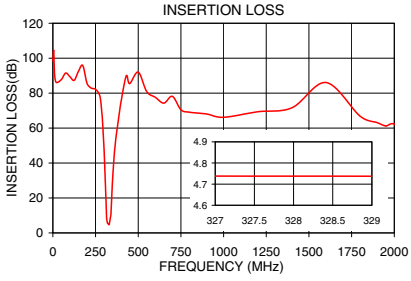


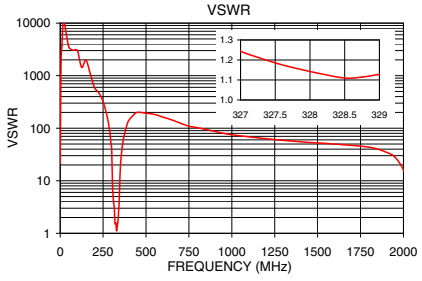
Functional Schematic

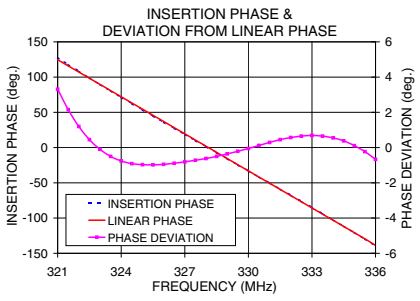


Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg.)
0.5	98.42	21.31	320.5	3.31
300.0	47.79	40.68	321.0	2.15
305.0	34.72	7.84	321.5	1.20
310.0	21.65	4.39	322.0	0.45
313.0	13.80	3.50	323.0	-0.50
315.0	8.57	3.09	324.0	-0.91
327.0	4.84	1.24	325.0	-0.98
327.5	4.80	1.19	326.0	-0.89
328.0	4.77	1.14	327.0	-0.72
328.5	4.73	1.11	327.5	-0.62
329.0	4.74	1.13	328.0	-0.50
337.0	8.74	1.77	329.0	-0.21
343.0	16.63	3.43	330.0	0.12
350.0	31.08	16.97	331.0	0.45
370.0	54.91	66.63	332.0	0.65
500.0	92.01	193.16	333.0	0.65
1000.0	66.20	75.04	334.0	0.38
2000.0	62.21	16.09	335.5	-0.67







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.
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