

Bandpass Filter

50Ω 119 to 125 MHz

Maximum Ratings

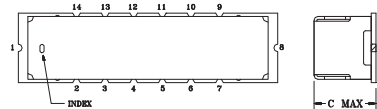
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W at 25°C

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

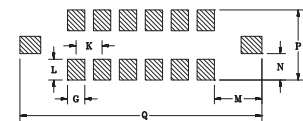
Pin Connections

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

Outline Drawing



PCB Land Pattern



Suggested Layout
Tolerance to be within ±.002

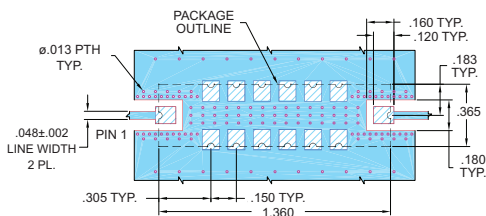
METALLIZATION
 SOLDER RESIST

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:

- 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.
- 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

Features

- Good VSWR, 1.3:1 typ @ passband
- High stop band rejection

Application

- Harmonic rejection
- Transmitters/receivers



CASE STYLE: HQ1157
PRICE: \$39.95 ea. QTY (1-9)

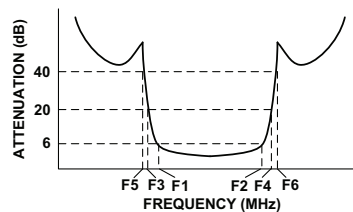
+RoHS Compliant

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

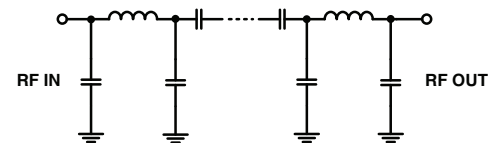
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 6dB) F1 - F2	STOPBANDS (MHz)		VSWR (:1)	
		Loss > 20dB F3 F4	Loss > 40dB F5 F6	Passband Max.	Stopband Typ.
122	119 - 125	111 132	105 137 - 500	1.6	20

Typical Frequency Response

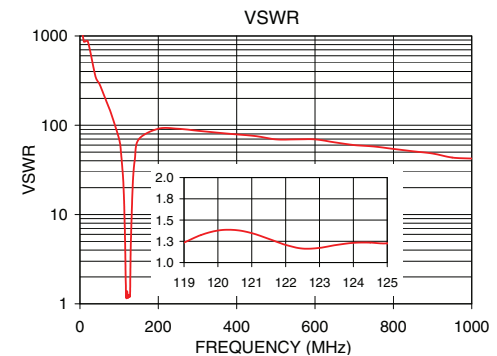


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	92.37	1737.18
85	81.88	124.09
100	60.85	69.49
105	49.55	48.26
108	42.04	35.46
111	31.87	21.46
114	18.58	8.72
116	9.21	2.94
119	4.53	1.24
122	4.06	1.16
125	4.60	1.23
127	6.21	1.19
129	13.29	2.69
132	30.67	11.61
134	39.84	19.11
137	50.38	29.96
141	59.83	44.55
500	60.64	69.49



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