

Bandpass Filter

JCBP-900+

50Ω 480 to 1320 MHz

Maximum Ratings

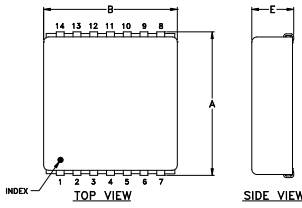
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W

Permanent damage may occur if any of these limits are exceeded.

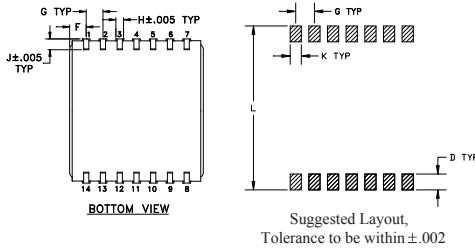
Pin Connections

INPUT	2
OUTPUT	9
GROUND	1,3,4,5,6,7,8,10,11,12,13,14

Outline Drawing



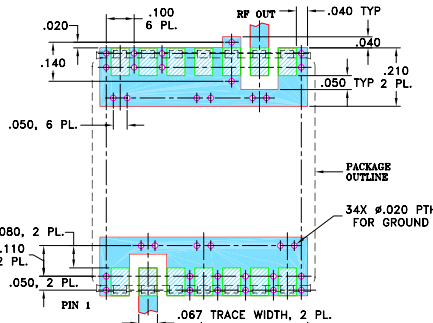
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.870	.800	--	.100	.250	.100
22.09	20.32	--	2.54	6.35	2.54
G	H	J	K	L	wt.
.100	.047	.065	.065	.890	grams
2.54	1.19	1.65	1.65	22.60	4.0

Demo Board MCL P/N: TB-442+ Suggested PCB Layout(PL-269)



- NOTES:
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .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, 1.2:1 typ @ passband
- High stopband rejection
- Aqueous washable

Applications

- Harmonic rejection
- Transmitters/receivers
- Military communications



CASE STYLE: BG291

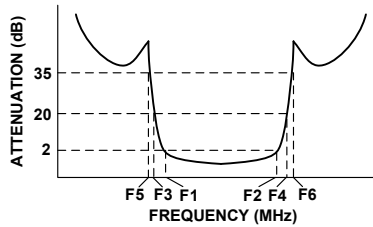
+RoHS Compliant

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

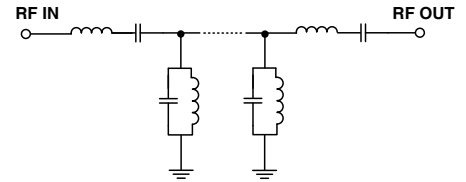
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2dB)	STOPBANDS (MHz)			VSWR (:1)	
		Loss > 20dB	Loss 35dB Typ.	F5 F6	Passband Max.	Stopband Typ.
900	F1 - F2	F3 F4	F5 F6	1800 - 3000	2.0	20

Typical Frequency Response



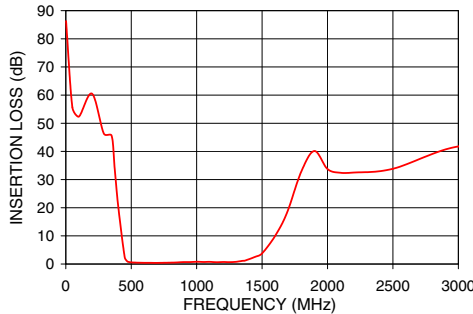
Functional Schematic



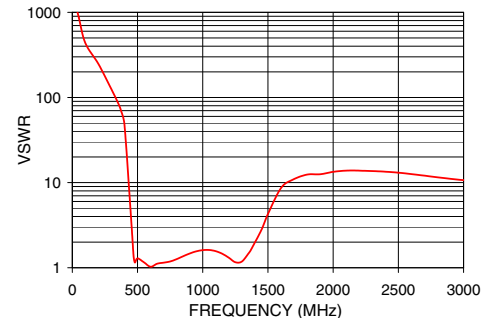
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
4.0	76.70	1737.18
100.0	52.57	434.30
200.0	62.04	248.17
376.0	37.48	69.49
380.0	35.44	66.82
420.0	15.63	26.33
438.0	7.66	9.33
450.0	3.67	3.91
480.0	0.85	1.15
900.0	0.78	1.47
1320.0	1.01	1.27
1420.0	1.98	2.25
1490.0	3.76	3.95
1550.0	7.41	6.37
1650.0	15.15	10.25
1790.0	33.08	12.26
1800.0	35.10	12.44
2500.0	34.80	13.09
3000.0	40.09	10.69

INSERTION LOSS



VSWR



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
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