Surface Mount

Bandpass Filter

JCBP-290+

50Ω 100 to 480 MHz

CASE STYLE: BG291

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

Features

- High stopband rejection
- Aqueous washable

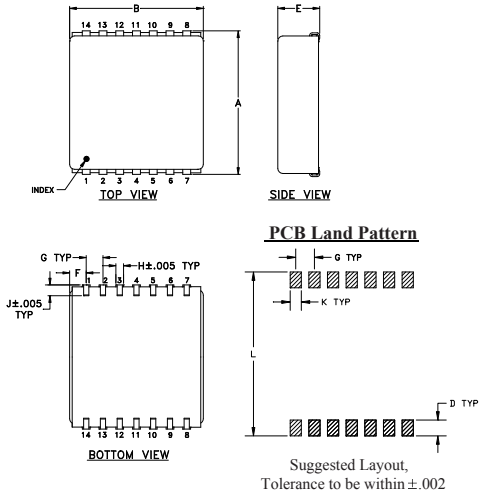
Applications

- Harmonic rejection
- Transmitters/receivers
- Military communications

+RoHS Compliant

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

Outline Drawing

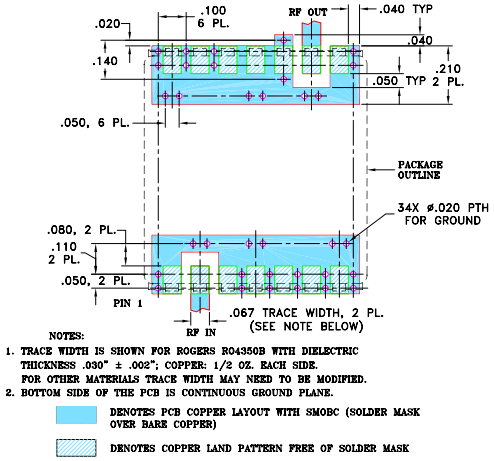


Outline Dimensions (inch / mm)

A	B	C	D	E	F
.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

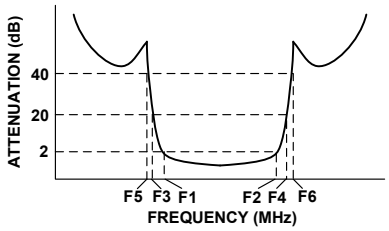
Demo Board MCL P/N: TB-442+
Suggested PCB Layout(PL-269)



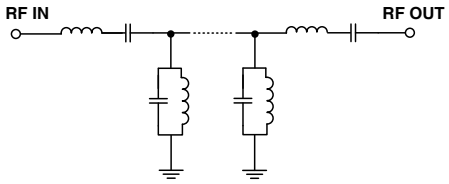
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2dB) F1 - F2	STOPBANDS (MHz) Loss > 20dB F3	F4	Loss > 40dB F5	F6	VSWR (:1) Passband Max.	Stopband Typ.
290	100 - 480	65	630	50	760 - 2000	2.2	20

Typical Frequency Response

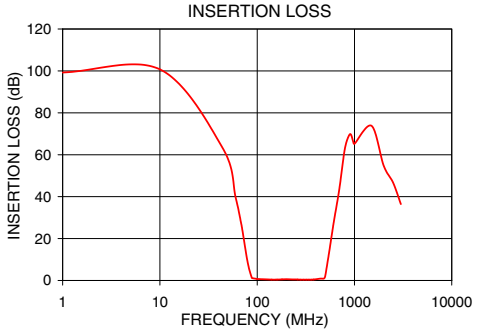


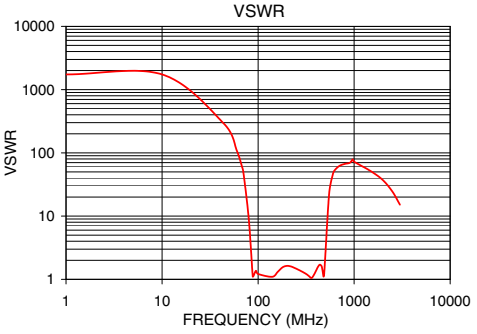
Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
5.0	100.66	1737.18
50.0	54.53	193.02
65.0	32.31	75.53
70.0	24.77	51.10
78.0	11.82	14.87
82.0	5.50	5.03
85.0	2.40	2.08
88.0	1.27	1.10
100.0	0.72	1.22
290.0	0.39	1.31
480.0	0.85	1.11
498.0	1.71	2.00
510.0	3.51	3.92
526.0	7.30	9.33
554.0	14.72	25.56
630.0	31.11	54.29
760.0	54.49	64.35
1500.0	73.77	51.10
2000.0	54.74	36.97





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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