

Bandpass Filter

BFCN-2555+

50Ω 2500 to 2610 MHz



CASE STYLE: FV1206-1

Maximum Ratings

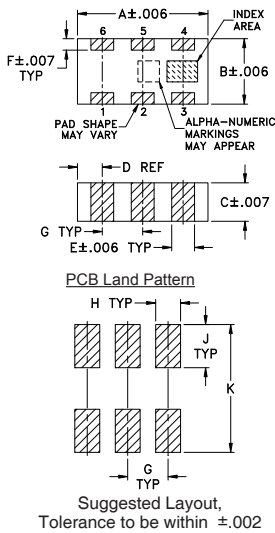
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	1.5W at 25°C

* 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	3
GROUND	2,4,5,6

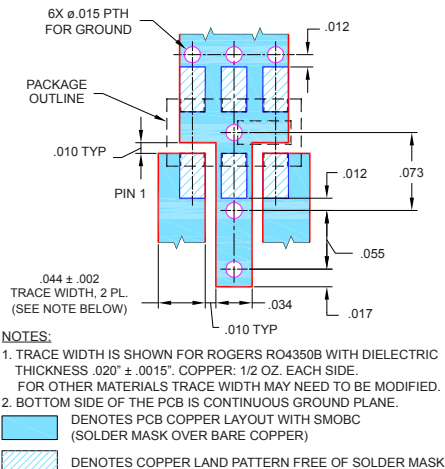
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K	wt.	
.039	.024	.042	.123	grams	
0.99	0.61	1.07	3.12	.020	

Demo Board MCL P/N: TB-285
Suggested PCB Layout (PL-158)



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

Features

- Good VSWR, 1.6:1 typ @ passband
- Small size
- Temperature stable
- LTCC construction

Applications

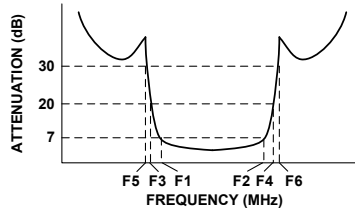
- Harmonic rejection
- Transmitters / receivers

Bandpass Filter Electrical Specifications^{1,2} (T_{AMB} = 25°C)

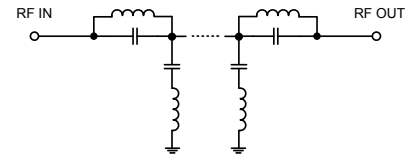
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 7dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB	Loss 30dB Typ	Passband	Stopband	Typ.	Max.	Typ.
Fc	F1 - F2	F3	F4	F5	F6			
2555	2500 - 2610	1970	3200	2000	3250 - 5500	1.6	2.8	20

1. Measured on Mini-Circuits Characterization Test Board TB-285.
2. This filter is not intended for use as a DC Blocking circuit element. In Application where DC voltage is present at either input or output ports, blocking capacitors are required at the corresponding RF port.

Typical Frequency Response



Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	81.46	289.53
200	82.15	124.09
500	62.32	75.53
1000	52.18	56.04
1970	37.86	23.49
2000	36.18	21.73
2200	20.62	9.58
2300	10.23	3.53
2350	6.16	1.78
2500	3.78	1.28
2555	3.73	1.35
2610	3.87	1.60
2850	7.85	1.33
2920	14.80	3.09
3000	24.74	6.51
3200	39.85	14.50
3250	40.88	15.67
3700	44.06	23.49
4500	39.38	28.03
5500	29.82	27.59

