

Bandpass Filter

BFCN-2555+

50Ω 2500 to 2610 MHz



CASE STYLE: FV1206-1
PRICE: \$3.95 ea. QTY (20)

Maximum Ratings

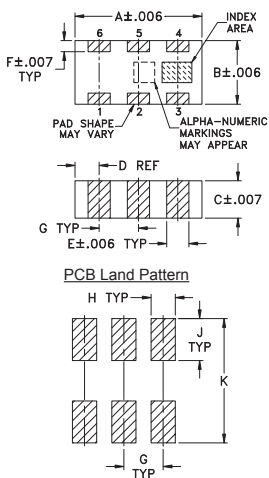
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	1.5W at 25°C

* 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

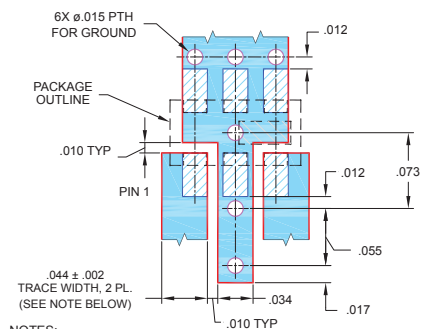


Outline Dimensions (inch/mm)

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:**
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" ± .0015". 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

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-Circuit's applicable established test performance criteria and measurement instructions.
- 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

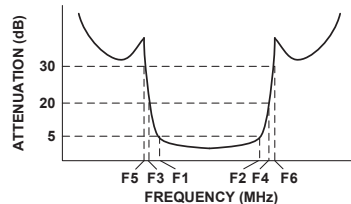
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

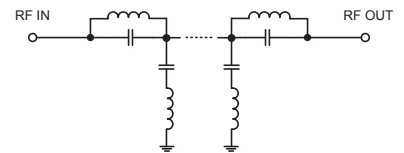
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 7dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB	Loss 30dB Typ	Passband Typ.	Passband Max.	Stopband Typ.		
Fc	F1 - F2	F3	F4	F5	F6			
2555	2500 - 2610	1970	3200	2000	3250 - 5500	1.6	2.8	20

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

