

Bandpass Filter

BFCN-732-2+

50Ω 6650 to 7950 MHz



CASE STYLE: FV1206-4

+RoHS Compliant

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



Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 3000

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Input Power(Avg. Operational)	0 dBm
Input Power(Peak Operational)	4 dBm
Input Power(No Damage)	10 dBm

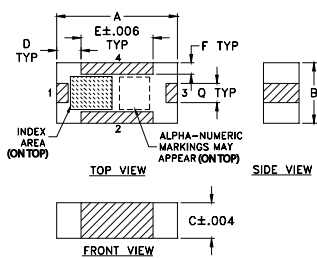
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

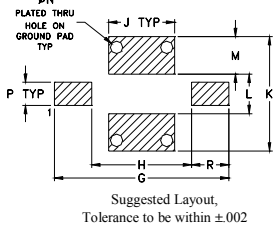
RF IN	1
RF OUT	3
GROUND	2,4

Product Marking: GR

Outline Drawing



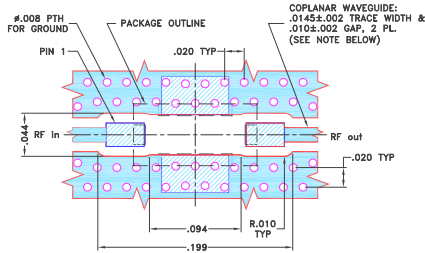
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.126	.063	.037	.026	.075	.012	.182	.104	.069
3.20	1.60	0.94	0.66	1.91	0.30	4.62	2.64	1.75
K	L	M	N	P	Q	R		wt
.119	.041	.039	.013	.024	.020	.039		grams
3.02	1.04	0.99	0.33	0.61	0.51	0.99		.020

Demo Board MCL P/N: TB-824+ Suggested PCB Layout (PL-454)



NOTES:

- TRACE WIDTH PARAMETERS ARE SHOWN FOR ROGERS RO4350R WITH DIELECTRIC THICKNESS .0068±.0007", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP 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

- Small size
- Temperature stable
- Hermetically sealed
- LTCC construction

Applications

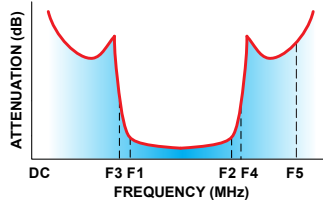
- Harmonic Rejection
- Transmitters / Receivers
- Avionics & Air Traffic Control

Electrical Specifications^{1,2} at 25°C

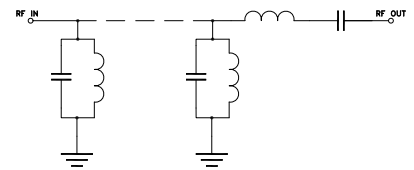
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	6650-7950	—	3.5	9.0	dB
	Stop Band	DC-1000	30	—	—	dB
		1000-2800	21	—	—	
2800-3400		20	—	—		
Input Return Loss	Output Return Loss	3400-3900	18	—	—	
		3000-5500	16	—	—	
		5500-6000	8	19.7	—	
		8500-9500	12	18.3	—	
Group Delay	—	—	380	—	pS	

- Measured on Mini-Circuits Characterization Test Board TB-824+.
- 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)
10	67.23	214.96
100	84.56	1212.87
1000	46.52	195.01
1800	36.34	114.51
2800	27.61	66.38
3400	23.96	53.84
5100	21.37	42.80
6500	3.19	3.56
6800	1.70	2.01
7100	1.13	1.39
7400	1.37	1.34
7700	3.28	2.74
7950	7.16	6.03
8500	23.06	13.08
10000	20.92	59.07

