Coaxial

Bandpass Filter

SBP-240+

50Ω 238 to 242 MHz

Generic photo used for illustration purposes only

CASE STYLE: FF99

The Big Deal

- High rejection
- Good VSWR, 1.3:1 typical in passband
- Narrow Bandwidth
- Flat group delay over passband
- Rugged unibody construction
- Connectorized package

Product Overview

SBP-240+ is a 50Ω bandpass filter in a connectorized package. This bandpass filter covers from 238 to 242 MHz, these units offer good matching within the passband and high rejection. This unit uses a miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across production lots and consistent performance across temperature.

Key Features

Feature	Advantages
High rejection	The model has group delay over passband around 48 ns
Good VSWR, 1.3:1 typical in passband	This provides well matched input and output ports.
Flat group delay over passband	The model has flat group delay of over passband which ensures that the signal distortion is very less.
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.

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Connectors	Model
SMA	SBP-240+

Features

- High rejection
- Good VSWR, 1.3:1 typical in passband
- Narrow bandwidth
- Flat group delay over passband
- Rugged unibody construction
- Connectorized package

Applications

- Fixed applications
- Mobile communication

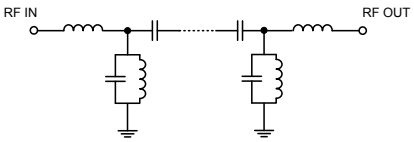
Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center frequency	-	-	-	240	-	MHz
	Insertion Loss	F1-F2	238 - 242	-	4.1	5.0	dB
	VSWR	F1-F2	238 - 242	-	1.3	1.8	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 210	40	48	-	dB
		F3-F4	210 - 220	20	32	-	dB
Stop Band, Upper	Insertion Loss	F5-F6	260 - 275	20	30	-	dB
		F6-F7	275 - 2000	40	50	-	dB

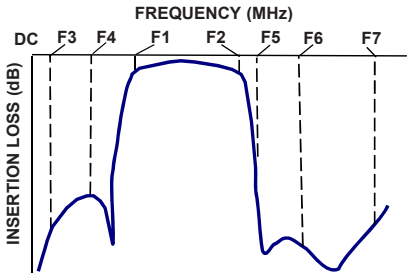
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.

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

Functional Schematic



Typical Frequency Response

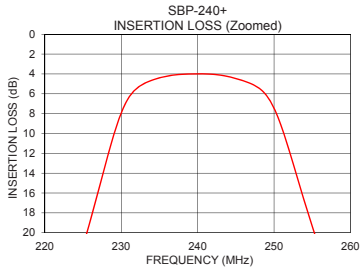


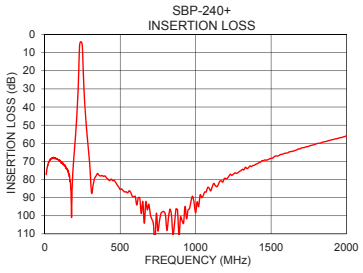
+RoHS Compliant

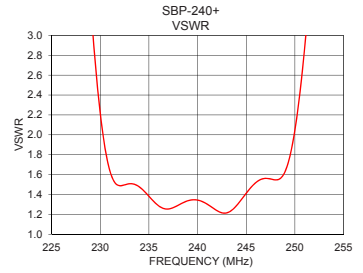
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

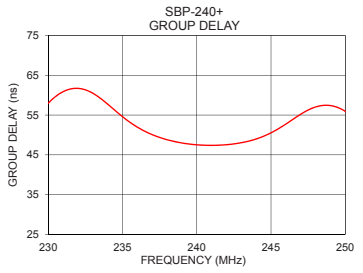
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
10	77.26	63.89	235.5	53.17
50	68.23	47.23	236.0	51.95
100	69.37	67.86	236.5	50.92
210	48.67	70.76	237.0	50.07
220	32.75	30.39	237.5	49.37
225	21.35	12.70	238.0	48.80
238	4.03	1.29	238.5	48.34
239	4.00	1.34	239.0	47.97
240	3.99	1.34	239.5	47.71
241	4.00	1.30	240.0	47.52
242	4.04	1.24	240.5	47.41
256	21.70	10.86	241.0	47.38
260	29.76	18.34	241.5	47.42
275	49.71	45.38	242.0	47.54
300	73.26	82.69	242.5	47.75
400	78.06	171.14	243.0	48.05
500	85.51	217.30	243.5	48.44
1000	98.33	202.26	244.0	48.97
1500	68.32	127.83	244.5	49.66
2000	55.90	85.62	245.0	50.53









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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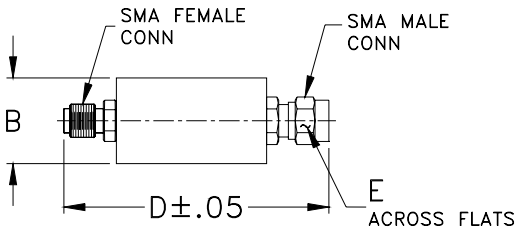
Coaxial Connections

PORT - 1	SMA-Male
PORT - 2	SMA-Female

Outline Drawing



Outline Dimensions (inch / mm)

B	D	E	Wt.
.70	**1.98**	**.312**	grams
17.78	50.29	7.92	42.0

Note: Please refer to case style drawing for details