Engineering Development Model

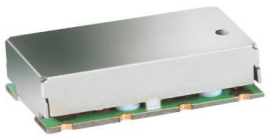
BandPass Filter SXBP-EDU1035

Surface Mount

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability.
At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

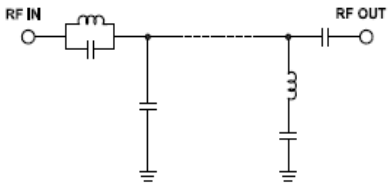
Please click "Back", and then click "Contact Us" for Applications support.



CASE STYLE : HF1317

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C				
Parameter	**Min.**	**Typ.**	**Max.**	**Units**
Passband (Loss < 2 dB)	130		170	MHz
Centre frequency		150		MHz
Low Band (Loss > 40 dB)	DC		82	MHz
Low Band (Loss > 20 dB)	82		90	MHz
High Band (Loss > 20 dB)	220		236	MHz
High Band (Loss > 40 dB)	236		260	MHz
Passband VSWR		1.2		(:1)
Stopband VSWR		20		(:1)

Functional Schematic



MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W

PIN CONNECTIONS	
Input	1
Output	8
Not Connected	-
Case Ground	2, 3, 4, 5, 6, 7

Surface Mount Band Pass Filter SXBP-EDU1035

Typical Performance Data

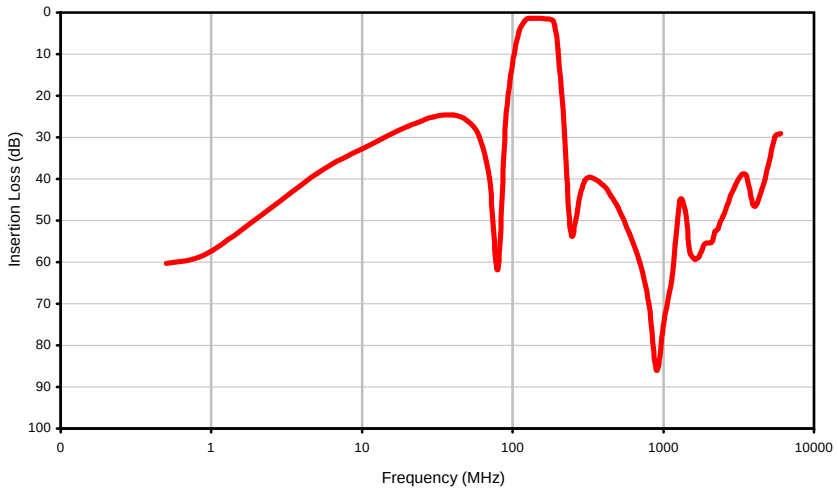
FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
0.5	60.36	0.01
1.0	57.34	0.01
5.0	38.74	0.01
10.0	32.79	0.03
20.0	27.39	0.12
30.0	25.06	0.29
40.0	24.64	0.51
50.0	26.01	0.74
60.0	29.89	0.94
70.0	39.91	1.09
80.0	61.71	1.25
90.0	26.58	1.51
100.0	12.32	2.54
110.0	4.55	6.23
120.0	1.95	12.87
130.0	1.32	21.03
180.0	1.70	21.24
190.0	3.17	12.02
200.0	8.88	3.49
210.0	18.19	1.34
220.0	28.58	0.88
230.0	40.02	0.70
240.0	51.78	0.60
250.0	53.76	0.52
300.0	40.24	0.33
400.0	41.58	0.19
450.0	44.17	0.16
500.0	46.97	0.14
600.0	53.16	0.13
700.0	60.10	0.14
800.0	70.01	0.16
900.0	86.00	0.19
1000.0	75.03	0.22
1100.0	67.26	0.24
1150.0	62.98	0.26
1200.0	55.77	0.28
1300.0	44.93	0.32
1400.0	47.76	0.34
1500.0	57.55	0.34
1600.0	59.28	0.35
1700.0	58.91	0.36
1800.0	57.03	0.37
1900.0	55.61	0.37
2100.0	55.27	0.37
2200.0	52.73	0.36
2300.0	52.02	0.35
2400.0	50.13	0.34
2500.0	48.89	0.33
3000.0	41.54	0.35
3500.0	38.92	0.49
4000.0	46.53	0.62
4500.0	42.78	0.85
5000.0	36.50	1.35
5500.0	29.89	2.04
6000.0	29.14	2.57

FREQUENCY (MHz)	GROUP DELAY (nsec)
110.0	16.56
112.0	17.50
114.0	16.68
115.0	16.24
116.0	15.83
118.0	14.84
120.0	14.12
122.0	13.34
124.0	12.66
125.0	12.37
126.0	12.08
128.0	11.56
130.0	11.15
131.0	10.99
132.0	10.73
134.0	10.50
135.0	10.24
136.0	10.27
138.0	10.00
140.0	9.81
141.0	9.73
142.0	9.64
144.0	9.48
145.0	9.48
146.0	9.42
148.0	9.37
150.0	9.33
151.0	9.39
152.0	9.30
154.0	9.42
155.0	9.49
156.0	9.41
158.0	9.51
160.0	9.65
161.0	9.58
162.0	9.74
164.0	9.80
165.0	9.91
166.0	9.97
168.0	10.14
170.0	10.40
171.0	10.58
172.0	10.73
174.0	10.98
175.0	11.22
176.0	11.44
178.0	11.88
180.0	12.54
181.0	12.80
182.0	13.20
184.0	14.12
185.0	14.54
186.0	15.05
188.0	16.25
190.0	16.67

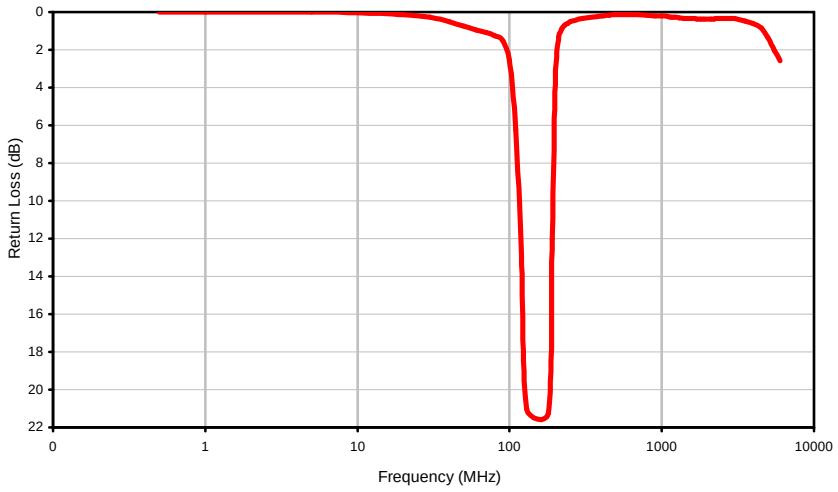
Surface Mount Band Pass Filter SXBP-EDU1035

Typical Performance Curves

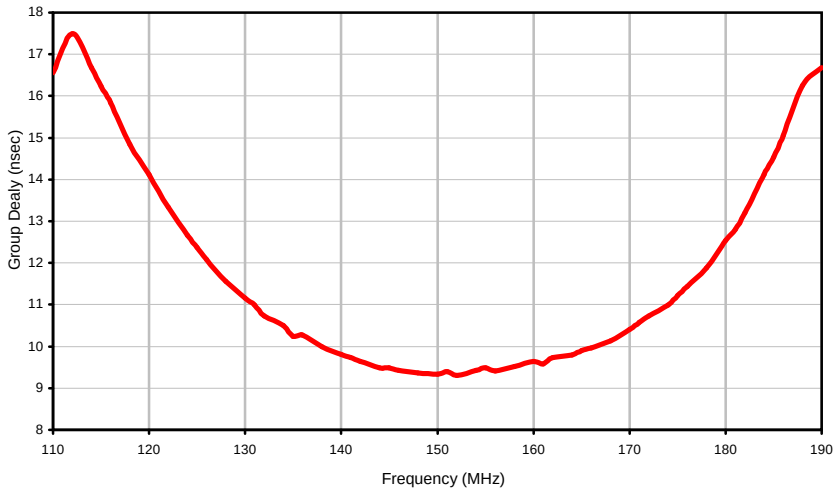
Insertion Loss



Return Loss



Group Delay



Mini-Circuits

Environmental Specifications ENV12

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-40° to 85° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-65° to 150° C Ambient Environment	Individual Model Data Sheet
Autoclave	15 psig, 100% RH, 121°C, 96 hours	JESD22-A102-C, Condition C
Temperature Cycling	-65° to 150°C, 100 cycles	JESD22-A104
Temperature Humidity	85°C/ 85% RH, 168 hours	JESD22-113
Solder Reflow Heat	Sn-Pb Eutetic Process: 240°C peak Pb-Free Process: 260°C peak	J-STD-020, Table 4-1, 4-2 and 5-2; Figure 5-1
Moisture Sensitivity: Level 1	Bake at 125°C for 24 hours Soak at 85°C/85% RH for 168 hours, Reflow 3 cycles at 240°C peak (Non-RoHS) or 260°C (RoHS)	J-STD-020
Solderability	10X magnification, 95% coverage	JESD22-B102, Method 1: Dip and Look Test
Mechanical Shock	50g, 11 ms, 1/2-sine, 18 shocks: 3 each direction, each of 3 axes	MIL-STD-202, Method 213, Condition A
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D