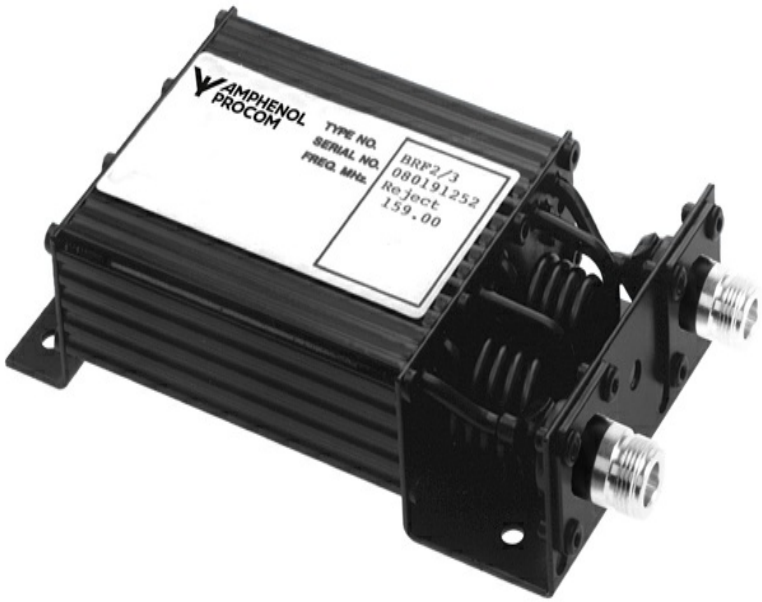
Band-Reject (Notch) Filters for the 160 MHz

DESCRIPTION

- The BRF 2/3 is a 3-cavity notchfilter using helical resonators.
- This filter rejects a narrow band of frequencies in the 2 m band and passes all others in the range 0 - 430 MHz. The filter can be applied both in connection with transmitters and receivers to attenuate interfering signals causing cross modulation effects. The filter can be employed as a single component or it can function as an integrated part of a complete multicoupling system.
- The BRF 2/3 can be tuned within the complete 144 - 175 MHz band. Careful design and choice of materials ensure reliable operation over a wide temperature range.
- The housing is made of extruded aluminium, the chassis of passivated steel, and teflon insulation has been applied in the coaxial cables and in the connectors.
- The filter is black-vinyl coated to prevent corrosion.



ORDERING

Type	Product No.
BRF 2/3	200001201

SPECIFICATIONS

Electrical	
Model	BRF 2/3
Filter Type	Band-reject (notch) filter
Frequency	144 - 175 MHz
Insertion Loss	0 - 200 MHz IL ≤ 0.8 dB 200 - 430 MHz IL ≤ 1.3 dB
1 dB Notch Bandwidth	At 144 MHz: Approx. +2.3/-2.2 MHz At 175 MHz: Approx. +2.6/-3.6 MHz
Impedance	50 Ω
Reject Attenuation	Single-channel tuned: = 53 dB Multi-channel tuned, 1.0 MHz BW: = 24 dB
VSWR	≤ 1.5:1 0 - 200 MHz ≤ 2.75:1 200 - 430 MHz
Maximum Input Power	50 W
Frequency Stability	10 ppm/° C (approx.)

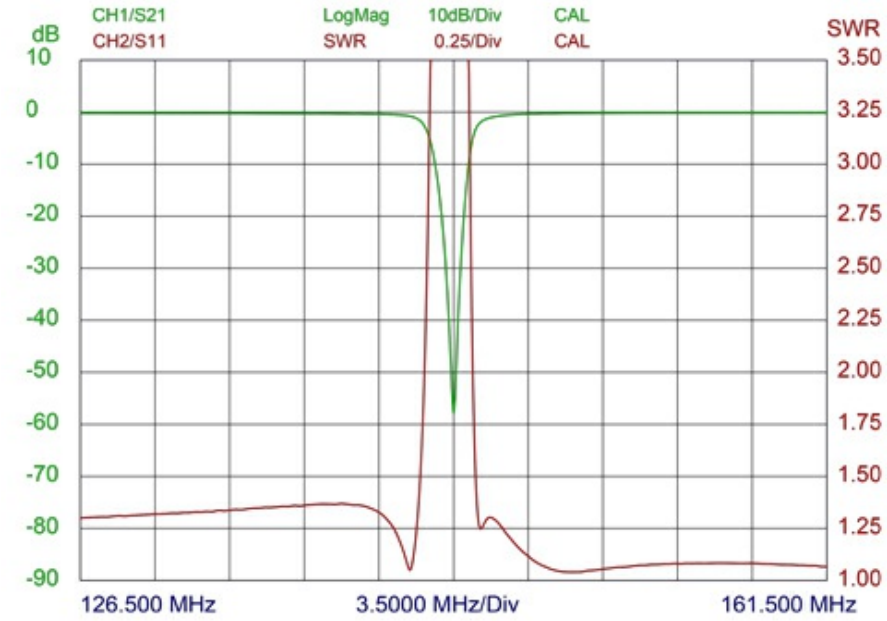
Mechanical	
Connection(s)	BNC(f)
Dimensions	165 x 77 x 33 mm
Weight	0.42 kg / 0.93 lb

Environmental	
Operating Temperature Range	-30 °C to +60 °C

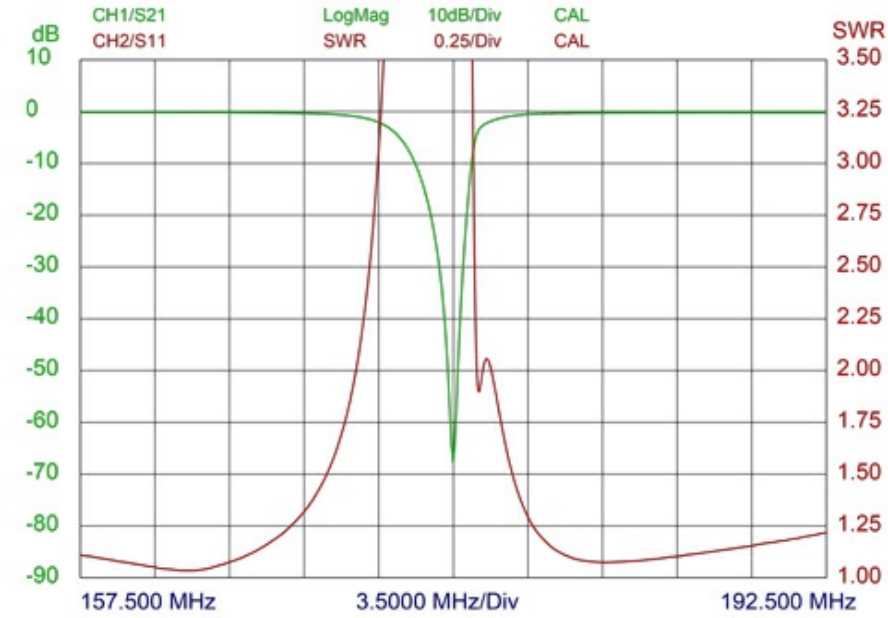
ADDITIONAL DATA

TYPICAL RESPONSE CURVES

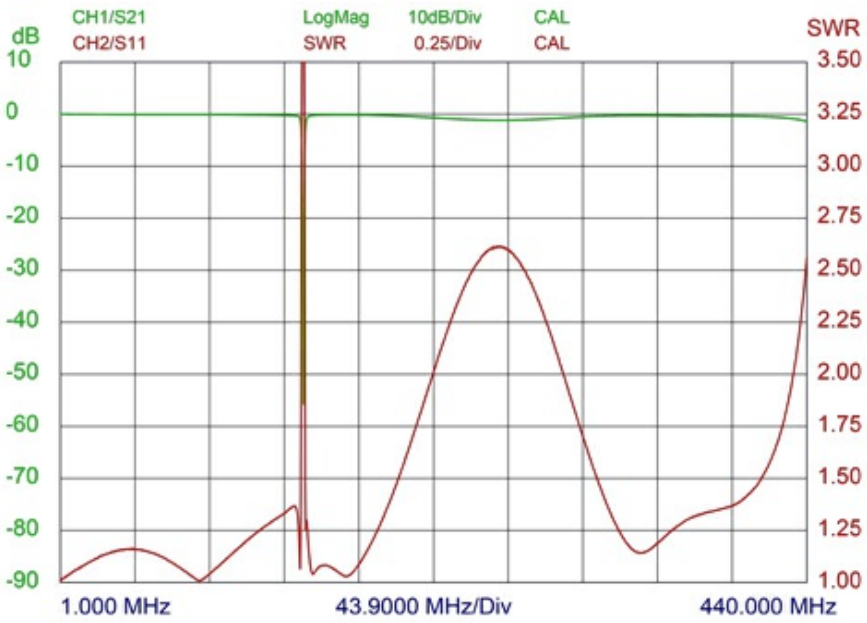
Fc 144 MHz



Fc 175 MHz



Out of reject area


CH1/S21
CH2/S11
LogMag
SWR
10dB/Div
0.25/Div
CAL
CAL
dB
SWR
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
1.000 MHz
43.9000 MHz/Div
440.000 MHz