



ABW Miniature Brickwall Filter

ULTRA SHARP CUTOFF MINIATURE LOWPASS VIDEO BRICKWALL FILTER

abwpr

The **ABW Series Miniature Broadcast Quality Brickwall Filters** were designed with original equipment manufacturers in mind. Their miniature size and superior performance will enhance any analog or digital television, RF or microwave product.

Applications

Key Features and Benefits

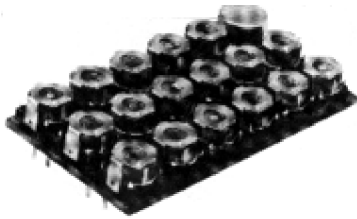
These ultra sharp cutoff filters are designed to improve analog and digital television signal by reducing interference from higher frequency subcarriers. Some application are:

- ▶ NTSC and PAL video systems
- ▶ ENG microwave system
- ▶ Microwave and studio equipment
- ▶ Roofing filters
- ▶ Lowpass filtering of audio from video signals
- ▶ Removing out-of-band interference
- ▶ Eliminating audio buzz caused by audio sub-carriers

- Ultra sharp cutoff filter with greater than 42dB attenuation
- Stopband ratio = $1.066 \times F_c$ (end of passband ripple frequency)
- ABW-4P20 will pass 4.2 MHz and give greater than 42dB rejection at 4.48 MHz
- Cutoff frequency available from 2 MHz to 8 MHz
- Phase & Delay equalized over 92.8% of the passband
- 75 Ohm impedance
- Good return loss. Greater than 20 dB
- Available in open or closed-box construction

Description

- Ultra sharp cutoff video lowpass filter available in open or closed box construction.
- For boxed unit (closed construction) replace "P" with "B" in part number. Example: ABW-4P20-B



Performance

- Passband Flatness from 100KHz Less than .15 dB peak to peak
- Insertion Loss at 100 KHz 5 dB max.
- Impedance 75 Ohms
- Return Loss Greater than 20 dB
- Group Delay Ripple ± 10 nanoseconds max.*
- Stopband Attenuation 42 dB min. to over 100 MHz
- Stopband Ratio @ 42 dB $1.066 \times F_c$ **
- Operating Temperature +32° to +150°F (0° to +65°C)

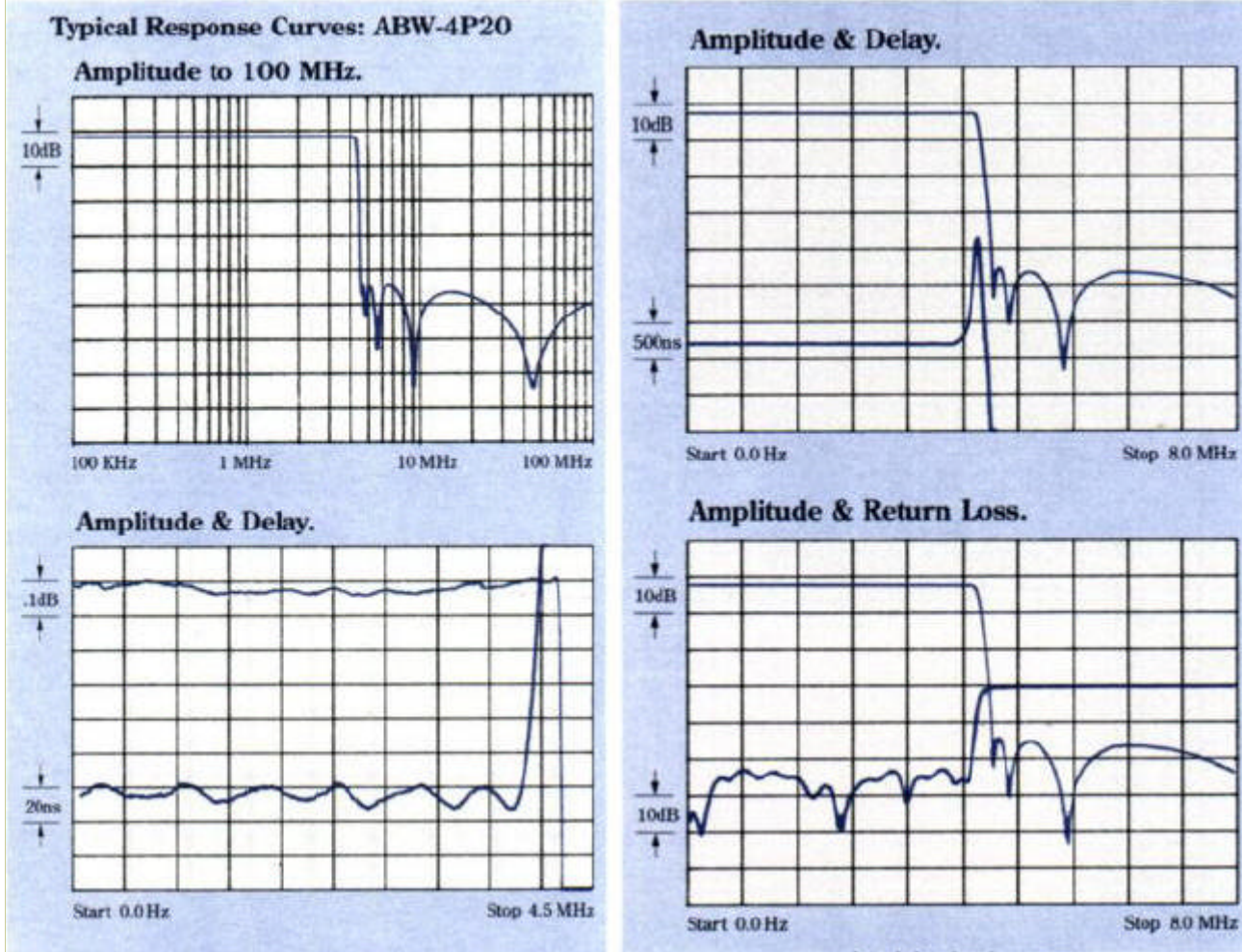
* ABW-2P00 = ± 15 nanoseconds max.

** F_c = end of passband frequency

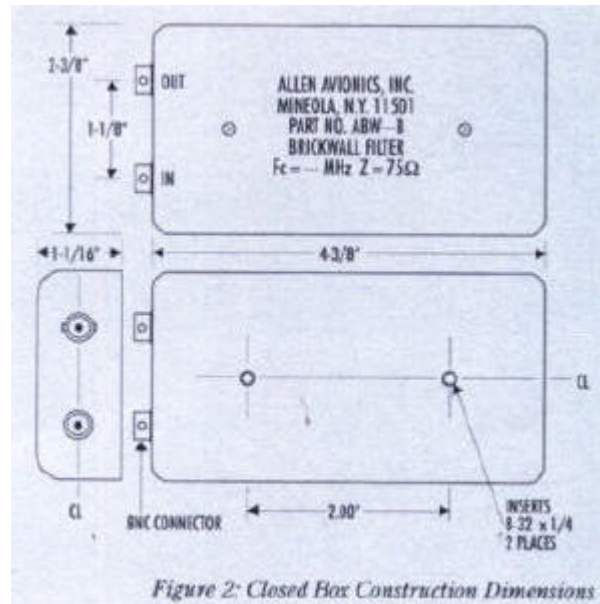
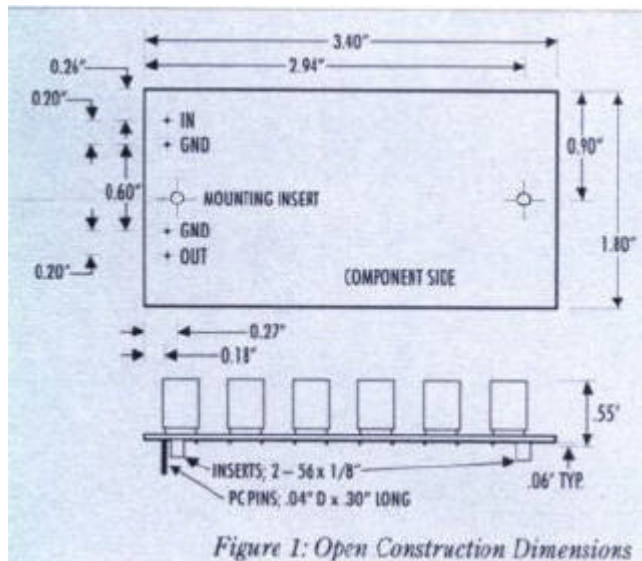
Part Number	End of Passband Ripple (MHz)	Start of Stopband (42 dB); Reference Frequency 100 KHz (MHz)	Group Delay Ripple		Nominal Propagation Delay (microseconds)
			nsec to	(MHz)	
ABW-2P00-P	2.00	2.13	30	1.85	3.045
ABW-4P20-P	4.20	4.48	20	3.90	1.450
ABW-4P49-P	4.49	4.79	20	4.17	1.356
ABW-5P00-P	5.00	5.33	15	4.64	1.218
ABW-5P10-P	5.10	5.44	15	4.73	1.190
ABW-5P40-P	5.40	5.76	15	5.01	1.130
ABW-5P56-P	5.56	5.93	15	5.16	1.095
ABW-6P00-P	6.00	6.40	15	5.57	1.015
ABW-6P80-P	6.80	7.25	15	6.31	0.895
ABW-8P40-P	8.40	8.95	15	7.80	0.725

Performance Data

Typical Response Curves: ABW-4P20



Package Dimensions



Allen Avionics, Inc.

224 East Second Street, Mineola, NY 11501

Phone: (516) 248-8080

Fax: (516) 747-6724

E-Mail: Info@AllenAvionics.com

We are pleased to accept

