

Baseband Channel / Brickwall Filter 581632 (9435-00)

FESTO

LabVolt Series

Datasheet



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General Description

The Baseband Channel / Brickwall Filter is designed for use with the Time-Division Multiplexer, Model 9460, the Time-Division Demultiplexer, Model 9461, and the T1/CEPT PCM Transceiver, Model 9462. Other modules that can be used with the Baseband Channel / Brickwall Filter are the Line Coder, Model 9464, and the Line Decoder, Model 9465.

The Baseband Channel section of the module provides the frequency characteristics of a twisted pair of wires. The line length simulated is selectable between 0.15, 0.30, 1, and 2 kilometers. An auxiliary noise input is provided for noise injection. Input and output impedances are 120 Ω and coupling is either DC or AC (10 kHz). When AC coupling is selected, both the input and output connectors have a balanced (ungrounded) characteristic.

The Brickwall Filter creates heavy intersymbol interference (ISI) conditions. The filter has a very sharp low-pass characteristic that cuts off at 60 dB per decade. Again, input and output impedances are 120 Ω and can be either DC or AC (balanced) coupled.

Specifications

Parameter	Value
Power Requirements	Connection to the Enclosure / Supply Regulator, Model 9420
Baseband Channel	
Maximal Input Voltage	3 V p-p
Input Impedance	120 Ω
Noise Input	
Maximal Output Voltage	3 V p-p with 120 Ω load
Frequency Range	
DC Coupling	0-15 MHz with 0.15 km line length
	0-9 MHz with 0.30 km line length
	0-1 MHz with 1.0 km line length
	0-100 kHz with 2.0 km line length
AC Coupling	10 kHz to 15 MHz with 0.15 km line length
	10 kHz to 9 MHz with 0.30 km line length
	10 kHz to 1 MHz with 1.0 km line length
	10 kHz to 100 kHz with 2.0 km line length
Maximal Voltage	2 V p-p
Impedance	500 Ω
Frequency Range	0-15 MHz
Brickwall Filter	
Maximal Input Voltage	3 V p-p
Input Impedance	120 Ω
Slope	60 dB/decade
Maximal Output Voltage	3 V p-p with 120 Ω load
Output Impedance	120 Ω
Physical Characteristics	
Dimensions (H x W x D)	83 x 142 x 212 mm (3.3 x 5.6 x 8.3 in)
Net Weight	0.9 kg (2 lb)

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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