

INSTRUCTION MANUAL

651141800E

DSV

Diplexer for Sub-Band and VHF Channels Stock No. 4375

Description

The DSV is a high performance, 75 Ohm, three port RF multiplexer. It may be used either to combine or to separate two bands of frequencies (5 to 30 / 50 to 1000 MHz). This frequency selective device provides a lower loss method of combining/separating signals than a conventional hybrid splitter. Internal filters provide a great degree of isolation between those bands. That isolation is necessary to prevent input overload of active devices located in the headend or distribution system where such signals are joined.

DSV applications include sub-split, bi-directional systems. These are usually LAN or CATV networks distributing data or video in the reverse direction via the sub-channel band. One example is an educational TV system. In this case, the DSV enables sub-channel TV signals from one or more closed circuit TV cameras to be sent, by means of the existing distribution cables, back to the headend where they can be converted to unused TV channels for distribution in the usual manner. Another example is the addition of AM radio to a TV distribution system. The DSV may also be used as a High-Pass or Low-Pass filter to solve a TVI problem by installing it in the line ahead of the affected device and terminating the unused port.

Features

- Low Thru-Loss
- High Isolation Between Bands
- Good VSWR in Both Bands
- Usable to 1 GHz
- Fiberglass Epoxy PC Board for High-Frequency Stability
- All-Aluminum Enclosure for Good Electrical Performance and Long Term Corrosion-free Reliability



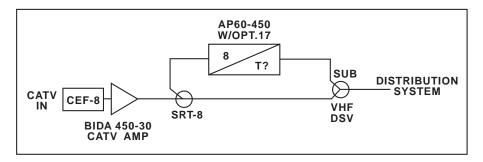
Specifications

Electrical (Typical)	High-Pass Filter Section	Low-Pass Filter Section
Impedance:	75 Ohm	75 Ohm
Passband		
Frequency:	50 to 1000 MHz	5 to 30 MHz
Bandpass Flatness:	0.5 dB P/V	0.5 dB P/V
Insertion Loss:	0.5 dB	0.5 dB
Match		
Input Return Loss:	14 dB	14 dB
Output Return Loss:	14 dB	14 dB
Stopband		
Frequency:	5 to 30 MHz	50 to 1000 MHz
Minimum Attenuation		
5 to 30 MHz:	55 dB	N/A
30 to 35 MHz:	45 dB	N/A
45 to 50 MHz:	N/A	45 dB
50 to 550 MHz:	N/A	55 dB
550 to 1000 MHz:	N/A	50 dB
Power Passing Cap:	No	500 mA
Mechanical		
Connections:	3 "F" Type Female Connectors (Hi/Lo/All Channel)	
Mounting:	Keyway Slot in Two End Flanges	

Dimensions:

Shipping Weight:

3 "F" Type Female Connectors (HI/Lo/All Chann Keyway Slot in Two End Flanges
7-3/8 " x 2" x 1-3/4", LxWxH
7.1 oz



Sub-Channel Local Origination w/CATV Feed

The DSV is conservatively designed and intended for operation over a wide range of environmental conditions. If trouble is noted, check for corrosion of connectors and other obvious signs of physical damage. Beyond visual inspection, services should not be attempted in the field. For service, pack the unit carefully, enclose a description of the trouble and ship the unit, prepaid to:

Service Department Blonder Tongue Laboratories, Inc. One Jake Brown Road Old Bridge, NJ 08857-1000

