

Diplexer for Sub-Band and VHF/UHF Channels

The DSV-42 is a 75 Ohm, three port, RF multiplexer. It may be used either to combine or to separate two bands of frequencies (DC to 42 / 54 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-42 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.



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



Ordering Information

Model	Stock #	Description
DSV-42	4376	Band Separator DC-42/54-1000 MHz Split

Specifications

Electrical (Typical)	High-Pass Filter Section	Low-Pass Filter Section
Impedance:	75 Ohm	75 Ohm
Passband		
Frequency:	50 to 1000 MHz	DC to 42 MHz
Bandpass Flatness:	0.5 dB P/V	0.5 dB P/V
Insertion Loss:	1.0 dB	0.5 dB
Match		
Input Return Loss:	14 dB	14 dB
Output Return Loss:	14 dB	14 dB
Stopband		
Frequency:	DC to 42 MHz	54 to 1000 MHz
Minimum Attenuation		
DC to 42 MHz:	55 dB	N/A
54 to 860 MHz:	N/A	55 dB
860 to 1000 MHz:	N/A	45 dB
Power Passing Cap:	No	650 mA

Mechanical

Connections:	3 "F" Type Female Connectors (Hi/Lo/All Channel)
Mounting:	Keyway Slot in Two End Flanges
Dimensions:	7-3/8" x 2" x 1-3/4", LxWxH
Shipping Weight:	7.1 oz

