



MFC

Microwave Filter Company, Inc.



TELEPHONE

(315) 438-4700

(800) 448-1666



WEBSITE

MicrowaveFilter.com



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MFCSales@MicrowaveFilter.com

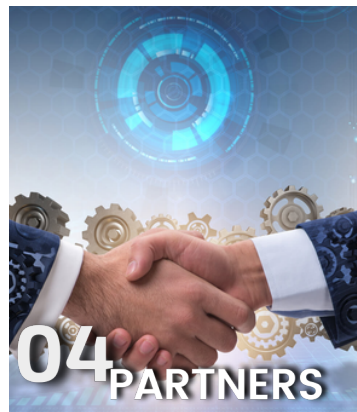
COMPANY PROFILE

Broadcast Products Edition

Innovative, Collaborative, Cutting Edge

"Creating custom solutions for a custom world."

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Microwave Filter Company's
**CAPABILITIES
STATEMENT**

Certifications

Small Business

ISO 9001:2015 Registered

ITAR Registered

Contact

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Vice President Sales & Marketing

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**MFC excels at manufacturing,
logistics, and collaborative
OEM design for our strategic
customers.**

Core Competencies:

- Collaborative Design and Manufacture of "High Performance OEM" Passive Electronic Filters
- High Volume Manufacturing
- Bandpass
- Bandstop
- Combiners
- Couplers
- Diplexers
- Highpass/Lowpass
- Adaptors
- Design and Manufacture of Various Topologies:
- Waveguide
- Stripline
- Lumped Element
- Cavity/Coaxial

GENERAL DYNAMICS
Information Technology

 **leidos**

Corporate Alliance Partner

LOCKHEED MARTIN

 **L3HARRIS™**

KYMETA™

The company occupies a modern 40,000 square foot facility in the heart of Central New York. All products are produced within our fully equipped facility, including an in-house machine shop and fully compliant finishing operation.

Differentiators:

- Customer Service/Technical Expertise
- In-House Simulation, Design, Machining, Finishing and Test Capabilities
- Prompt Response from Quote to Ship
- From Design to High Volume Manufacture of High Power Products
- Component Traceability
- Custom Design
- Contract Manufacturing
- In-House X-Ray & Measurement



Our Partners

At MFC, we are proud to work with partners that support the communications Industry.

- Thales
- Airbus
- AVL Technologies
- C-Com Satellite
- Cobham Satcom
- DataPath
- Geosync Microwave
- Gilat Satellite
- Hughes
- SES
- Northrop Grumman
- Sat-Lite Technologies
- STS Global
- ThinKom
- Toner Cable
- Viking Satcom
- TVC
- DH Antenna
- Kymeta
- Lockheed Martin
- General Dynamics
- L3Harris
- Leidos
- Sirius XM
- Cubic.com
- Kratos
- Boeing
- Echo Star
- CPI
- Lite Coms
- Mega Hertz
- SAAB
- Broadcasters General Store

Custom Designs

COLLABORATE WITH OUR TEAM TO MEET YOUR NEEDS.

We offer a detailed custom design process... "It's unlike any other manufacturer's". Partnering with all Industry stakeholders, executives, and decision makers to deliver a unique, budget friendly solution!

Custom production requires constant hands-on management. When you decide to partner with MFC for your custom filter needs, you get just that:

- A partner, just as invested in the design, production, and end-product as your team.
- A partner that provides "Lifetime Value" and is prepared for future changes.

Microwave Filter Company believes in collaborative design.

Contact us to discuss your custom solution options.

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MICROWAVE FILTER COMPANY'S

FM RECEIVE POPULAR OPTIONS

Model	Application	Description	Page Number
3303 Series	FM Receive	Bandpass Filter	7
3634 Series	FM Receive	Bandpass Filter	8
6367 Series	FM Receive	Notch Filter	9
9393	FM Receive	Bandpass Filter	10
9494	FM Receive	Bandpass Filter	10
9507	FM Receive	Bandpass Filter	10
9510	FM Receive	Bandpass Filter	10
9512	FM Receive	Bandpass Filter	10
9603	FM Receive	Notch Filter	11
9604	FM Receive	Notch Filter	11
9607	FM Receive	Notch Filter	11
9610	FM Receive	Notch Filter	11
9612	FM Receive	Notch Filter	11

3303 FM Series

FM (Wideband) Preselectors

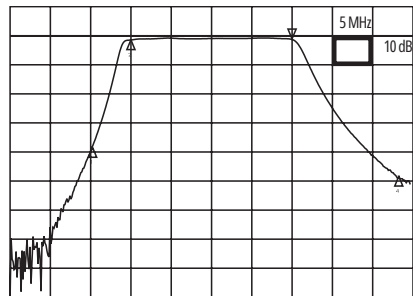
3303FM Bandpass Filters



3303FM-16 & 3303FM-20

These wideband filters are used to isolate the FM band from reception of VHF, paging and other potentially interfering off-air sources.

<i>Specifications:</i>	<i>3303FM-16</i>	<i>3303FM-20</i>
Passband	92-108 MHz	88-108 MHz
Insertion Loss	1.5 dB Max	1.5 dB Max
Rejection at 87.75 MHz	25 dB Min	3 dB Max
Rejection at 83.25 MHz	50 dB Min	30 dB Typ
Rejection at 121.25 MHz	50 dB Min	50 dB Typ
Return Loss	14 dB Min	14 dB Min



Typical Frequency Response of
3303FM-20

Mechanical Specifications:

Baseplate Dimensions: 10.25" x 1.5"
Rack Mount Available Upon Request
Connectors: F-female (Std.); N, SMA or BNC-female (Opt.)
Impedance: 75 Ohm (Std.); 50 Ohm (Opt.)

Ordering Information:

3303FM(X)(Y) - (BW)

(X) = Female Connector Type
= (No Designation) F
= (B) BNC, (S) SMA or (N) N

(Y) = Impedance
= (No Designation) 75 Ohm
= (50) 50 Ohm

(BW) = Receive Bandwidth
= (16) 16 MHz
= (20) 20 MHz



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3634 Series

FM (Single Channel) Preselector

3634FM Tunable Bandpass Filters 3634FM Series



3634FM

This high "Q" FM preselector isolates the desired channel from unwanted interference. Three self-locking tuning adjustments provide full FM tunability in the field. Factory tuned to your channel at no additional charge.

Specifications:

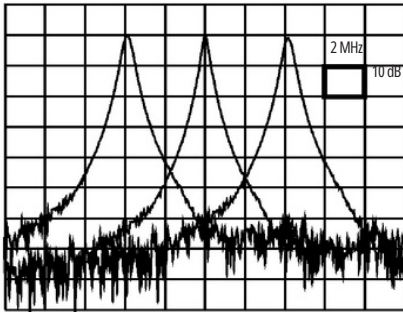
3 dB bandwidth 350 KHz \pm 10%
 Insertion Loss at Tuned Frequency 5 dB Max
 Rejection 20 dB Min \pm 800 KHz
 Return Loss 14 dB Min

Mechanical Specifications:

Baseplate Dimensions: 10" x 4.5"
 Rack Mount Available Upon Request
 Connectors: F-female (Std.); N, SMA or BNC-female (Opt.)
 Impedance: 75 Ohm (Std.); 50 Ohm (Opt.)

Ordering Information:

3634(X)(Y) - (Fo)
 (X) = Female Connector Type
 = (No Designation) F
 = (B) BNC, (S) SMA or (N) N
 (Y) = Impedance
 = (No Designation) 75 Ohm
 = (50) 50 Ohm



Typical Frequency Response of 3634FM



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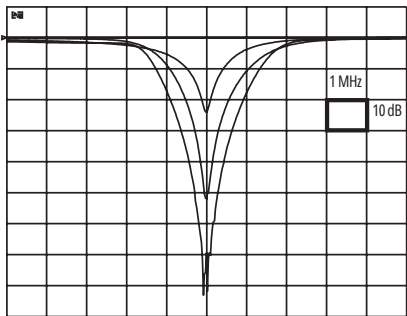
FM Tunable Notch Filters

6367 Series

6367 Single Cavity Tunable Notch Filters



6367



Typical Frequency Response
of F6367-3, FD6367-3, FT6367-
3

6367 Series

Model 6367 is easily tuned through its full frequency range. A second control allows adjusting the 3 dB bandwidth over a wide range. The adjustable bandwidth feature of these filters allows suppression of an unwanted carrier with minimum impact on adjacent, desired frequencies.

Cascade It For A Deeper Notch

For spot frequency applications, two or three identical units may be cascaded to produce a notch twice or three times as deep with the similar 3 dB bandwidth. Be sure to complete the model number by inserting the desired bandwidth.

Model #	50 Ohm Notch Depth (dB)**	75 Ohm Notch Depth (dB)**	Notch Depth Height (L-inches)	Tuning Range** (MHz)
6367-2 23 26			4.500	50-108
**With 3 dB bandwidth adjusted to 3 MHz				

Mechanical Specifications:

Baseplate Dimensions: 2" x 2" (single), 5" x 2" (double), 7" x 2" (triple)

Rack Mount Available Upon Request

Connector Options: 50 ohm-Type N, SMA or BNC

75 ohm-Type F

Ordering Information:

(X)(Y)6367-(Fo)/(BW3)

(X) - designates the connector type

Connectors: 50 ohm - BNC (B)
SMA (S)
Type N (N)
75 ohm - Type F (F)

(Y) - designates number of cavities

Cavities: (D) Double
(T) Triple

(Fo) - designates the notch frequency (MHz)

(BW3) - designates the 3 dB bandwidth (MHz)

Note: Orders for double and triple cavity 6367's must specify notch frequency and 3 dB bandwidth.



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HIGH Q Cavity Notch Filters

MODELS 9603, 9604, 9607, 9610, 9612

Microwave Filter Company's line of High Q Notch or Band Reject filters is field tunable using rotating loops and an adjustable resonator for applications in removing interfering carriers that cause intermodulation products.

Standard models are available in single, double and triple cavities covering a broad frequency range of 30-950 MHz. Phased together or cascaded, filter cavities can be combined to increase attenuation at a spot frequency or across a wider band.

Constructed with aluminum housings, high conductivity resonator and an invar tuning rod, the notch filters have excellent power handling capabilities and temperature stability.

Custom designs are also available.



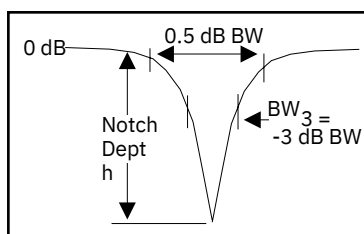
96xx -(Fo)(# sections)(BW)³
Fo = Notch frequency

Freq. Range (MHz)	9603 3"x3"	9604 4"x4"	9607 7" Dia.	9610 10" Dia	9612 12" Dia.
30 - 200					
200 - 300					
300 - 406					
406 - 512					
512 - 700					
700 - 950					

BandwidthUp to 3% (bandwidth/center frequency)
Return Loss14 dB Min
Power Rating350 watts w/0.5 dB insertion loss
250 watts w/1.0 dB insertion loss
100 watts w/2.0 dB insertion loss
Temperature stability0 .0005 MHz/°C
Approx. sizeDiameter x 1/4 wave length
ConnectorsType N Female (50 ohms)

0.5 dB BANDWIDTH

Single Cavity	3.0 x BW ³
Double Cavity	3.0 x BW ³
Triple Cavity	3.0 x BW ³



NOTCH DEPTH - dB

	9603	9604	9607	9610	9612
Single Cavity	20Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Double Cavity	40Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Triple Cavity	60Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$



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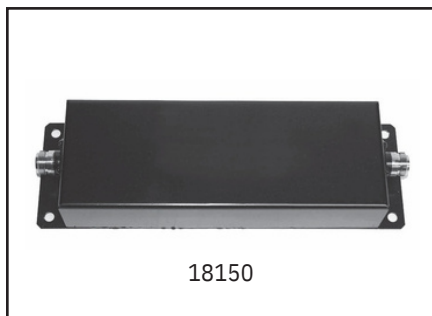
MICROWAVE FILTER COMPANY'S

FM TRANSMIT POPULAR OPTIONS

Model	Application	Description	Page Number
7123	FM Transmit	Lowpass Filter	13
7131	FM Transmit	Lowpass Filter	13
9393	FM Transmit	Bandpass Filter	14
9494	FM Transmit	Bandpass Filter	14
9507	FM Transmit	Bandpass Filter	14
9510	FM Transmit	Bandpass Filter	14
9512	FM Transmit	Bandpass Filter	14
9603	FM Transmit	Notch Filter	15
9604	FM Transmit	Notch Filter	15
9607	FM Transmit	Notch Filter	15
9610	FM Transmit	Notch Filter	15
9612	FM Transmit	Notch Filter	15

FM Harmonic Low Pass Filters

These FM transmit filters provide deep suppression of harmonics with minimal impact on the fundamental transmit signal.



Model 18150

• **300 Watt** (CW) Transmit Power Rating

• **2nd thru 10th Harmonics Suppression**

Ideal for eliminating potential interference to these bands:

- DTV - **VHF-Hi** (7-13)
- DTV - **UHF** (14-51)
- Wireless - **700 MHz**
- Wireless - **850 MHz**



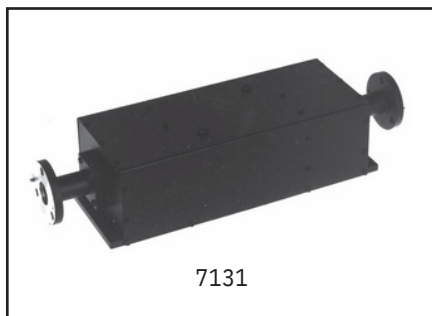
Model 7123

• **500 Watt** (CW) Transmit Power Rating

• **2nd thru 10th Harmonics Suppression**

Ideal for eliminating potential interference to these bands:

- DTV - **VHF-Hi** (7-13)
- DTV - **UHF** (14-51)
- Wireless - **700 MHz**
- Wireless - **850 MHz**



Model 7131

• **1500 Watt** (CW) Transmit Power Rating

• **2nd thru 4th Harmonics Suppression**

Ideal for eliminating potential interference to these bands:

- DTV - **VHF-Hi** (7-13)

See Chart Below for Additional Information on these products

Model Number	Passband (MHz)	Passband Loss	Passband VSWR	Rejection	Dimensions	Connectors
18150	88 - 108	0.20 dB Typ 0.25 dB Max	1.15:1 Max	70 dB Min from 176 - 540 MHz 60 dB Min from 528 - 1080 MHz	9.50" x 3.00" x 1.50"	N-female
7123	88 - 108	0.10 dB Typ 0.25 dB Max	1.25:1 Max	50 dB Min from 176 - 216 MHz 60 dB Min from 264 - 432 MHz 80 dB Min from 440 - 1080 MHz	5.85" x 1.75" x 2.125"	N-female
7131	88 - 108	0.14 dB Typ 0.20 dB Max	1.30:1 Max	40 dB Min from 176 - 432 MHz	14.50" x 4.13" x 3.00"	7/8" EIA



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HIGH Q Cavity Notch Filters

MODELS 9603, 9604, 9607, 9610, 9612

Microwave Filter Company's line of High Q Notch or Band Reject filters is field tunable using rotating loops and an adjustable resonator for applications in removing interfering carriers that cause intermodulation products.

Standard models are available in single, double and triple cavities covering a broad frequency range of 30-950 MHz. Phased together or cascaded, filter cavities can be combined to increase attenuation at a spot frequency or across a wider band.

Constructed with aluminum housings, high conductivity resonator and an invar tuning rod, the notch filters have excellent power handling capabilities and temperature stability.

Custom designs are also available.



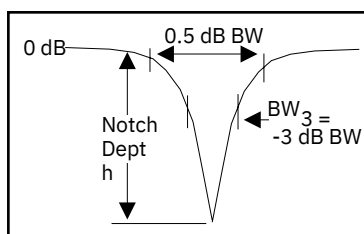
96xx -(Fo)(# sections)(BW)³
Fo = Notch frequency

Freq. Range (MHz)	9603 3"x3"	9604 4"x4"	9607 7" Dia.	9610 10" Dia	9612 12" Dia.
30 - 200					
200 - 300					
300 - 406					
406 - 512					
512 - 700					
700 - 950					

BandwidthUp to 3% (bandwidth/center frequency)
Return Loss14 dB Min
Power Rating350 watts w/0.5 dB insertion loss
250 watts w/1.0 dB insertion loss
100 watts w/2.0 dB insertion loss
Temperature stability0 .0005 MHz/°C
Approx. sizeDiameter x 1/4 wave length
ConnectorsType N Female (50 ohms)

0.5 dB BANDWIDTH

Single Cavity	3.0 x BW ₃
Double Cavity	3.0 x BW ₃
Triple Cavity	3.0 x BW ₃



NOTCH DEPTH - dB

	9603	9604	9607	9610	9612
Single Cavity	20Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Double Cavity	40Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Triple Cavity	60Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$



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MICROWAVE FILTER COMPANY'S

UHF RECEIVE POPULAR OPTIONS

Model	Application	Description	Page Number
3160 Series	UHF Receive	Bandpass Filter	17
3278D Series	UHF Receive	Bandpass Filter	18
6367 Series	UHF Receive	Notch Filter	19
9393	UHF Receive	Bandpass Filter	20
9494	UHF Receive	Bandpass Filter	20
9507	UHF Receive	Bandpass Filter	20
9510	UHF Receive	Bandpass Filter	20
9512	UHF Receive	Bandpass Filter	20
14584	UHF Receive	Bandpass Filter	21
9603	UHF Receive	Notch Filter	22
9604	UHF Receive	Notch Filter	22
9607	UHF Receive	Notch Filter	22
9610	UHF Receive	Notch Filter	22
9612	UHF Receive	Notch Filter	22

3160 Series

VHF Channel Bandpass Filter



3160D

3160D Series

A general purpose, low insertion loss, channel bandpass filter, the model 3160D suppresses most out-of-band interference. Its applications include processor clean-up before combining or filtering off air receptions.

Available DTV Channels	Selectivity (relative to Channel Center)	Channel Insertion Loss (Max)
2 to 13	25 dB Typ \pm 9MHz	2 dB
Return Loss: 14 dB Min		

Mechanical Specifications:

Baseplate Dimensions: 6" x 2.25"

Rack Mount Available Upon Request

Connectors: F-female (Std.); N, SMA or BNC-female (Opt.)

Impedance: 75 Ohm (Std.); 50 Ohm (Opt.)

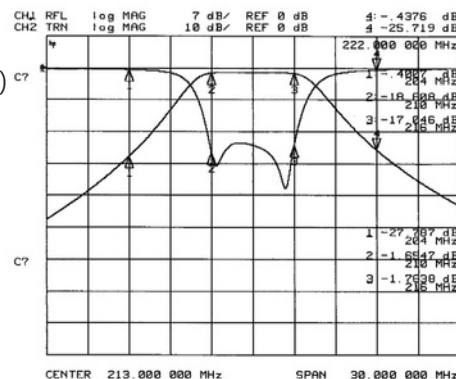
Ordering Information:

3160D(X)(Y) - (CH)

(X) = Female Connector Type
 = (No Designation) F
 = (B) BNC, (S) SMA or (N) N

(Y) = Impedance
 = (No Designation) 75 Ohm
 = (50) 50 Ohm

(CH) = channel #



Typical Frequency Response of 3160D



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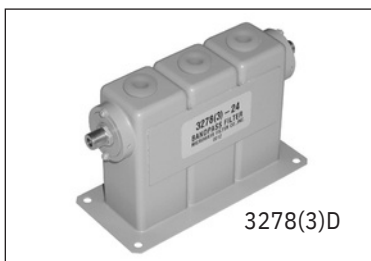
3278D Series

DTV (UHF & VHF) Channel Bandpass Filters (*Selective*)

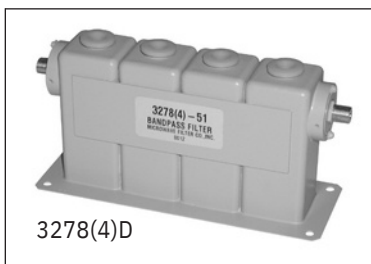
UHF Channel Bandpass Filter 3278D Series



3278(2)D



3278(3)D



3278(4)D

Series 3278D bandpass filters are available in two, three or four cavity models to provide three different configurations that are increasingly selective. They are used for UHF processor cleanup or for pre-amp protection against overload from strong out-of-band interference. They are factory tuned to a specified UHF channel, but can be factory retuned to any other UHF channel (14 - 36).

	2 Cavity	3 Cavity	4 Cavity
Channel Insertion Loss:	1.0 dB Max	2.0 dB Max	3.0 dB Max
25 dB Typ rejection from Fo:	± 26 MHz	± 11 MHz	± 8 MHz
Return Loss:	14 dB Min		

Mechanical Specifications:

Model 3278(2)D Baseplate Dimensions: 3.8" x 2.4"

Model 3278(3)D Baseplate Dimensions: 5.2" x 2.4"

Model 3278(4)D Baseplate Dimensions: 6.6" x 2.4"

Rack Mount Available Upon Request

Connectors: F-female (Std.); N, SMA or BNC-female (Opt.) Impedance: 75 Ohm (Std.); 50 Ohm (Opt.)

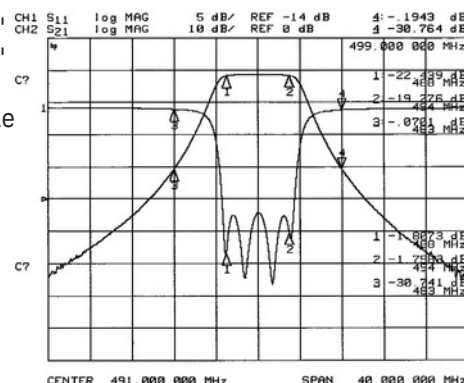
Ordering Information:

3278(#D)(X)(Y) - (CH)

(X) = Female Connector Type
 = (No Designation) F
 = (B) BNC, (S) SMA or (N) N

(Y) = Impedance
 = (No Designation) 75 Ohm
 = (50) 50 Ohm

(CH) = channel #



Typical Frequency Response of
3278D



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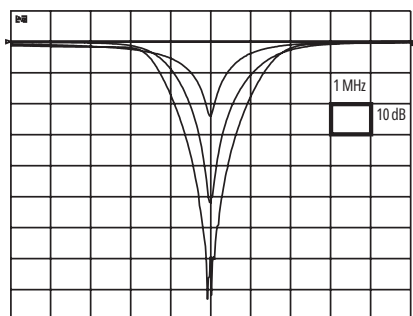
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FM Tunable Notch Filters

6367 Series

6367 Single Cavity Tunable Notch Filters



Typical Frequency Response
of F6367-3, FD6367-3, FT6367-
3

6367 Series

Model 6367 is easily tuned through its full frequency range. A second control allows adjusting the 3 dB bandwidth over a wide range. The adjustable bandwidth feature of these filters allows suppression of an unwanted carrier with minimum impact on adjacent, desired frequencies.

Cascade It For A Deeper Notch

For spot frequency applications, two or three identical units may be cascaded to produce a notch twice or three times as deep with the similar 3 dB bandwidth. Be sure to complete the model number by inserting the desired bandwidth.

Model #	50 Ohm Notch Depth (dB)**	75 Ohm Notch Depth (dB)**	Notch Depth Height (L-inches)	Tuning Range** (MHz)
6367-2 23 26			4.500	50-108
**With 3 dB bandwidth adjusted to 3 MHz				

Mechanical Specifications:

Baseplate Dimensions: 2" x 2" (single), 5" x 2" (double), 7" x 2" (triple)

Rack Mount Available Upon Request

Connector Options: 50 ohm-Type N, SMA or BNC
75 ohm-Type F

Ordering Information:

(X)(Y)6367-(Fo)/(BW3)

(X) - designates the connector type

Connectors: 50 ohm - BNC (B)
SMA (S)
Type N (N)
75 ohm - Type F (F)

(Y) - designates number of cavities

Cavities: (D) Double
(T) Triple

(Fo) - designates the notch frequency (MHz)

(BW3) - designates the 3 dB bandwidth (MHz)

Note: Orders for double and triple cavity 6367's must specify notch frequency and 3 dB bandwidth.



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14584

DTV (UHF & VHF) Channel Bandpass Filters (*Ultra-Selective*)

UHF Channel Bandpass Filters



14584D

14584D Series

Designed for any UHF channel (14 to 51), the 14584D suppresses strong adjacent channel interference while maintaining low insertion loss on the desired channel.

Available DTV Channels	Channel Insertion Loss (Max)	Selectivity (Relative to Channel Center)	Group Delay
14 to 51	5.0 dB	35 dB Min \pm 5MHz	180 ns Typ
Return Loss: 18 dB Min			

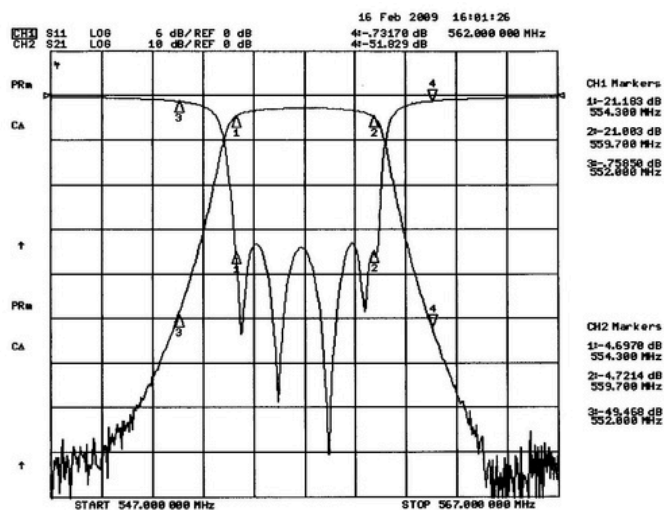
Mechanical Specifications:

Available in rack or wall mount versions
Connectors: F-female (Std.); N, SMA or BNC-female (Opt.)
Impedance: 75 Ohm (Std.); 50 Ohm (Opt.)

Ordering Information:

14584D(X)(Y) - (CH)U

- (X) = Female Connector Type
= (No Designation) F
= (B) BNC, (S) SMA or (N) N
- (Y) = Impedance
= (No Designation) 75 Ohm
= (50) 50 Ohm
- (CH) = channel #



Typical Frequency Response of 14584D



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HIGH Q Cavity Notch Filters

MODELS 9603, 9604, 9607, 9610, 9612

Microwave Filter Company's line of High Q Notch or Band Reject filters is field tunable using rotating loops and an adjustable resonator for applications in removing interfering carriers that cause intermodulation products.

Standard models are available in single, double and triple cavities covering a broad frequency range of 30-950 MHz. Phased together or cascaded, filter cavities can be combined to increase attenuation at a spot frequency or across a wider band.

Constructed with aluminum housings, high conductivity resonator and an invar tuning rod, the notch filters have excellent power handling capabilities and temperature stability.

Custom designs are also available.



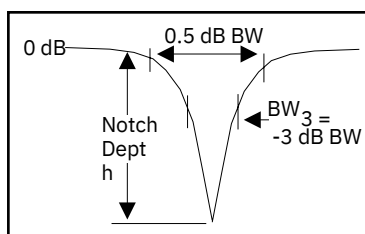
96xx -(Fo)(# sections)(BW)³
Fo = Notch frequency

Freq. Range (MHz)	9603 3"x3"	9604 4"x4"	9607 7" Dia.	9610 10" Dia	9612 12" Dia.
30 - 200					
200 - 300					
300 - 406					
406 - 512					
512 - 700					
700 - 950					

BandwidthUp to 3% (bandwidth/center frequency)
Return Loss14 dB Min
Power Rating350 watts w/0.5 dB insertion loss
250 watts w/1.0 dB insertion loss
100 watts w/2.0 dB insertion loss
Temperature stability0 .0005 MHz/°C
Approx. sizeDiameter x 1/4 wave length
ConnectorsType N Female (50 ohms)

0.5 dB BANDWIDTH

Single Cavity	3.0 x BW ₃
Double Cavity	3.0 x BW ₃
Triple Cavity	3.0 x BW ₃



NOTCH DEPTH - dB

	9603	9604	9607	9610	9612
Single Cavity	20Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Double Cavity	40Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Triple Cavity	60Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$



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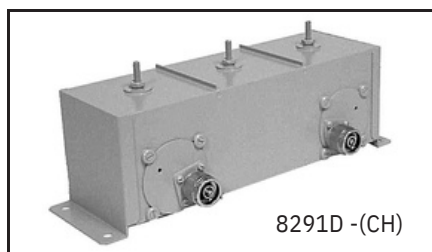
MICROWAVE FILTER COMPANY'S

UHF TRANSMIT

POPULAR OPTIONS

Model	Application	Description	Page Number
6464	UHF Transmit	Bandpass Filter	24
8291	UHF Transmit	Bandpass Filter	24
9393	UHF Transmit	Bandpass Filter	25
9494	UHF Transmit	Bandpass Filter	25
9507	UHF Transmit	Bandpass Filter	25
9510	UHF Transmit	Bandpass Filter	25
9512	UHF Transmit	Bandpass Filter	25
16541	UHF Transmit	Bandpass Filter	26
16542	UHF Transmit	Bandpass Filter	27
16543	UHF Transmit	Bandpass Filter	28
16544	UHF Transmit	Bandpass Filter	29
16690	UHF Transmit	Bandpass Filter	30
9603	UHF Transmit	Notch Filter	31
9604	UHF Transmit	Notch Filter	31
9607	UHF Transmit	Notch Filter	31
9610	UHF Transmit	Notch Filter	31
9612	UHF Transmit	Notch Filter	31

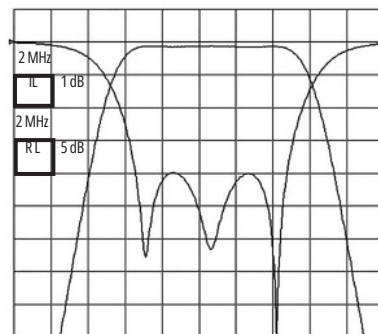
DTV (UHF & VHF) Channel Transmit Bandpass Filters



8291D -(CH)

These DTV bandpass filters are installed at the transmitter output to suppress out-of-band emissions which may interfere with other channels. They feature low loss to maximize station coverage. Special bandpass filters can be designed to meet your specific needs.

- 50 ohm Impedance
- N Female Connectors, except:
Model 6464D (7/8" EIA)
Model 18030 (1 5/8" EIA)

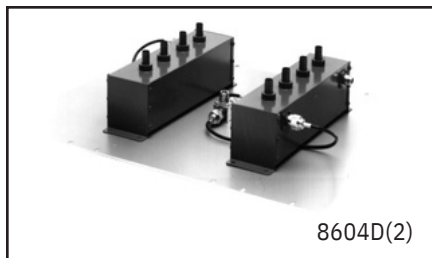


Typical Frequency Response of 17494

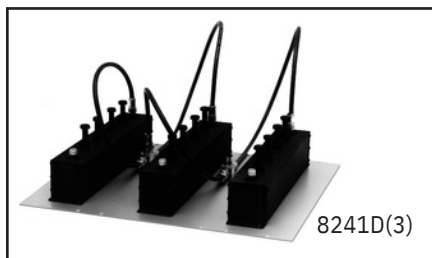
Specifications:

	8603D-(CH)	8241D-(CH)	8291D -(CH)	17494-(CH)	6464D -(CH)	18030-(CH)
Available	DTV (2-6)	DTV (7-13)	DTV (14-51)	DTV (14-51)	DTV (14-51)	DTV (14-51)
Channels Channel Insertion	1 dB Max	1 dB Max	1 dB Max	1 dB Max	0.75 dB Max	0.75 dB Max
Loss	20 dB Min	20 dB Min	15 dB Typ	20 dB Min	20 dB Min	20 dB Min
Selectivity (Relative to Channel Center)	± 9.0 MHz	± 9.0 MHz	± 9.0 MHz	± 9.75 MHz	± 9.0 MHz	± 9.0 MHz
Channel VSWR	1.2:1 Max	1.2:1 Max	1.2:1 Max	1.2:1 Max	1.25:1 Max	1.25:1 Max
Power Rating	250 Watts Max	100 Watts Max	250 Watts Max	500 Watts Max	1 kW Max	2.5 kW Max

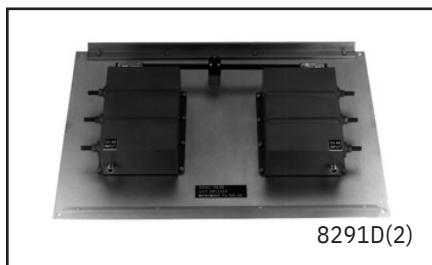
DTV (UHF & VHF) Channel Transmit Combiners



8604D(2)



8241D(3)



8291D(2)

VHF Channels 2-13 & UHF Channels 14-51

These combiners connect multiple channel transmitters to a common tower transmission line. Special combiners can be designed for your application.

Specifications:

	8604D (*)	8241D (*)	8291D (*)	17494 (*)	6464D (*)
Channels	DTV (2-6)	DTV (7-13)	DTV (14-51)	DTV (14-51)	DTV (14-51)
Max Number of channels combined	3	3	15	8	8
Loss (Max)	1 dB	1 dB	1 dB	1 dB	0.75 dB
Selectivity (Relative to Channel Center)	20 dB Min ± 9 MHz	20 dB Min ± 9 MHz	15 dB Min ± 9 MHz	20 dB Min ± 9.75 MHz	20 dB Min ± 9 MHz
Power Rating Max (Per Channel)	250 Watts	100 Watts	250 Watts	500 Watts	1 kW
Channel VSWR Max	1.33:1	1.33:1	1.33:1	1.33:1	1.33:1
Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Input Connectors	N Female	N Female	N Female	N Female	7/8" EIA
Antenna Connectors	N Female	N Female	N Female	1 5/8" EIA	1 5/8" EIA

(*) = Number of channels to be combined



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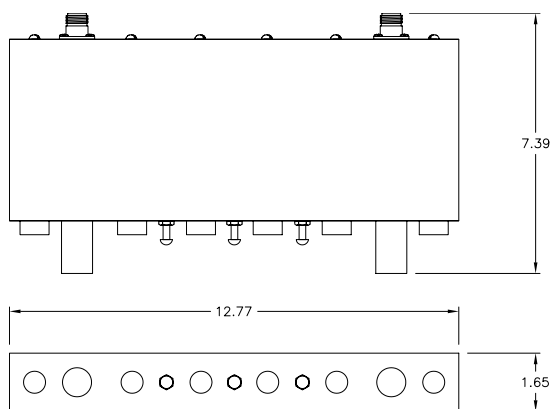
DTV (UHF) Channel Transmit Bandpass Filters

These filters suppress out-of-band emissions in conformance with FCC *digital mask* requirements for UHF (DTV) Single Channel Broadcasts.

Features

- 6-pole design provides ultra-selectivity
- Tailored to meet your transmit power requirements with 5 models to choose from: 100W, 250W, 500W, 1kW, and 2.5kW
- Lightweight & compact design
- Optional connectors available
- Special configurations available upon request (e.g. -multi channel combining)
- 50 Ohm Impedance

Model # 16541 (100W)



Specifications	Model # 16541
Frequency Range	(470 – 806) MHz
Insertion Loss @ Center	1.2 dB (Max)
Frequency (Fo) Passband Loss (Fo ±2.7 MHz)	2.2 dB (Max)
Return Loss	24 dB (Min)
Group Delay Variation	150 nS (Max)
Selectivity (Min.)	6 dB (Fo ± 3.5 MHz) 24 dB (Fo ± 6 MHz) 36 dB (Fo ± 9 MHz)
Power Rating	100 Watts (Max)
Standard Connectors	N-female



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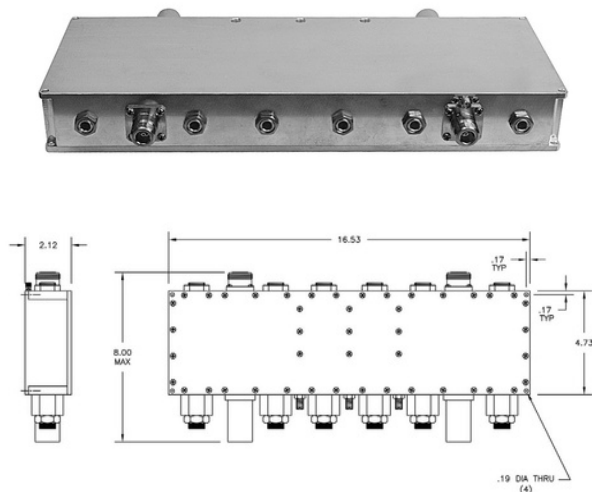
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DTV (UHF) Simple Mask Filter

MFC supplies critical equipment for your UHF Repack requirement.

This filter, along with a UHF transmitter, allows your system to conform to the FCC spectral mask.



Features :

- 6-pole design provides ultra-selectivity
- Optional connectors available
- Special configurations available upon request (e.g. multi-channel combining)
- 50 ohm Impedance

Model 16542-(Ch) 250 Watt (Fixed)

Specifications	
Channel Option	CH 14-36
Insertion Loss @ Fo	0.9 dB Max
Passband	(Fo) \pm 2.7 MHz
Passband Loss	1.5 dB Max @ Passband
Passband VSWR	Edges 1.135:1
Passband Power	250 Watts Max
Passband Delay Variation	150 nSEC Max
Rejection	6 dB Min @ (Fo) \pm 3.5 MHz 24 dB Min @ (Fo) \pm 6 MHz 36 dB Min @ (Fo) \pm 9 MHz
Impedance	50 Ohms
Connectors	N Female



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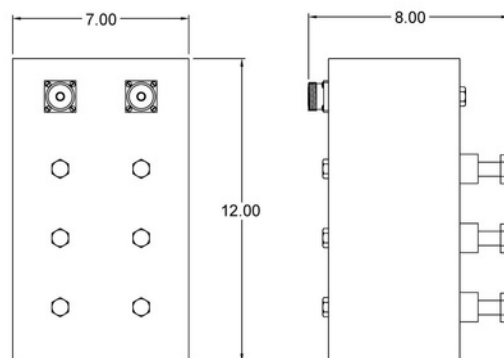
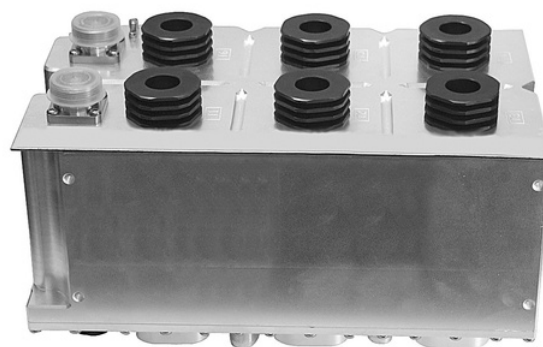
DTV (UHF) Tunable Channel Mask Filter

Model 16543

This tunable bandpass filter suppresses out-of-band emissions in conformance with FCC digital mask requirements for UHF single channel broadcasts.

Model 16543

Specifications	
Available Channels (Tunable)	DTV (14 - 51)
Channel Insertion Loss	1.20 dB Max @ $F_c \pm 2.7$ MHz
Channel VSWR	1.11:1 Max
Group Delay Variation	150 nS Max
Selectivity (Relative to Channel Center)	6 dB Min +/- 3.5 MHz 26 dB Min +/- 6 MHz 45 dB Min +/- 9 MHz
Power Rating (CW)	500 Watts Max
Impedance	50 Ohms
Standard Connectors	7/16 (DIN) - female



Alternate Connectors are Available Upon Request



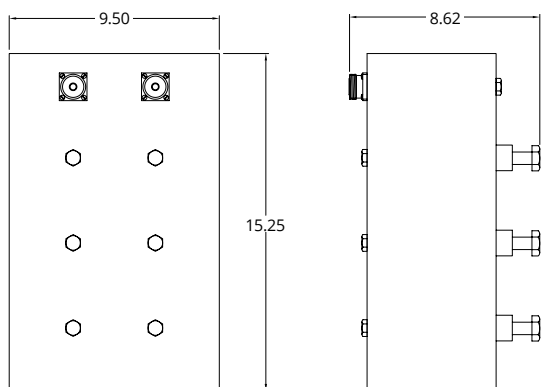
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DTV (UHF) Channel Transmit Bandpass Filters

Model # 16544 (1kW)



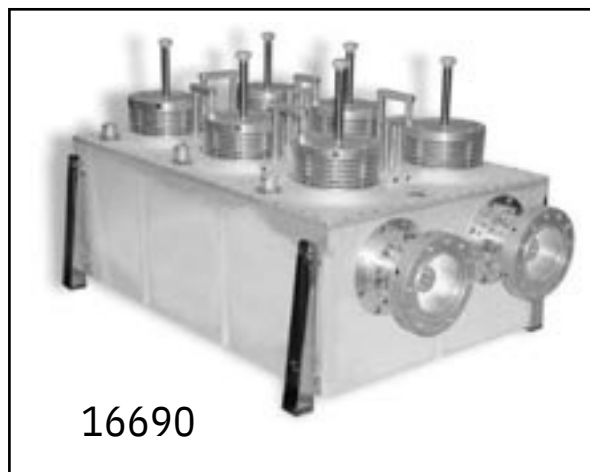
Specifications	Model # 16544
Frequency Range	(4700-806) MHz
Insertion Loss @ Center Frequency (Fo)	0.50 dB Max
Passband Loss (Fo +/- 2.7 MHz)	0.90 dB Max
Return Loss	26 dB (Min)
Group Delay Variation	150 nS (Max)
Selectivity (Min.)	6 dB (Fo ± 3.5 MHz) 26 dB (Fo ± 6 MHz) 45 dB (Fo ± 9 MHz)
Power Rating	1 KW (Max)
Standard Connectors	7/8 EIA



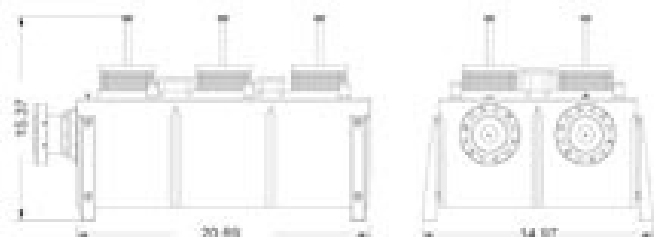
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DTV (UHF) Channel Transmit Bandpass Filters**Model # 16690 (2.5 kW)**

Specifications	Model # 16690
Frequency Range	(470 – 806) MHz
Insertion Loss @ Center Frequency (Fo)	0.42 dB (Max)
Passband Loss (Fo \pm 2.7 MHz)	0.72 dB (Max)
Return Loss	26 dB (Min)
Group Delay Variation	150 nS (Max)
Selectivity (Min.)	6 dB (Fo \pm 3.5 MHz) 26 dB (Fo \pm 6 MHz) 45 dB (Fo \pm 9 MHz)
Power Rating	2.5 kW (Max)
Standard Connectors	1 5/8 EIA



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Constructed with aluminum housings, high conductivity resonator and an invar tuning rod, the notch filters have excellent power handling capabilities and temperature stability.

Custom designs are also available.



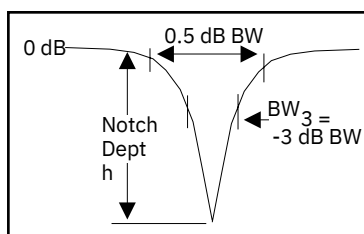
96xx -(Fo)(# sections)(BW)3
Fo = Notch frequency

Freq. Range (MHz)	9603 3"x3"	9604 4"x4"	9607 7" Dia.	9610 10" Dia	9612 12" Dia.
30 - 200					
200 - 300					
300 - 406					
406 - 512					
512 - 700					
700 - 950					

BandwidthUp to 3% (bandwidth/center frequency)
Return Loss14 dB Min
Power Rating350 watts w/0.5 dB insertion loss
250 watts w/1.0 dB insertion loss
100 watts w/2.0 dB insertion loss
Temperature stability0 .0005 MHz/°C
Approx. sizeDiameter x 1/4 wave length
ConnectorsType N Female (50 ohms)

0.5 dB BANDWIDTH

Single Cavity	3.0 x BW ₃
Double Cavity	3.0 x BW ₃
Triple Cavity	3.0 x BW ₃



NOTCH DEPTH - dB

	9603	9604	9607	9610	9612
Single Cavity	20Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Double Cavity	40Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$
Triple Cavity	60Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{300} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{380} \frac{(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{4}{60} \frac{(BW)}{\sqrt{F_o}} \right]$



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MICROWAVE FILTER COMPANY'S

VHF RECEIVE POPULAR OPTIONS

Model	Application	Description	Page Number
3160 Series	VHF Receive	Bandpass Filter	33
3303 Series	VHF Receive	Bandpass Filter	34
6367 Series	VHF Receive	Notch Filter	35
9393	VHF Receive	Bandpass Filter	36
9494	VHF Receive	Bandpass Filter	36
9507	VHF Receive	Bandpass Filter	36
9510	VHF Receive	Bandpass Filter	36
9512	VHF Receive	Bandpass Filter	36
9603	VHF Receive	Notch Filter	37
9604	VHF Receive	Notch Filter	37
9607	VHF Receive	Notch Filter	37
9610	VHF Receive	Notch Filter	37
9612	VHF Receive	Notch Filter	37

3160 Series

VHF Channel Bandpass Filter



3160D

3160D Series

A general purpose, low insertion loss, channel bandpass filter, the model 3160D suppresses most out-of-band interference. Its applications include processor clean-up before combining or filtering off air receptions.

Available DTV Channels	Selectivity (relative to Channel Center)	Channel Insertion Loss (Max)
2 to 13	25 dB Typ \pm 9MHz	2 dB
Return Loss: 14 dB Min		

Mechanical Specifications:

Baseplate Dimensions: 6" x 2.25"

Rack Mount Available Upon Request

Connectors: F-female (Std.); N, SMA or BNC-female (Opt.)

Impedance: 75 Ohm (Std.); 50 Ohm (Opt.)

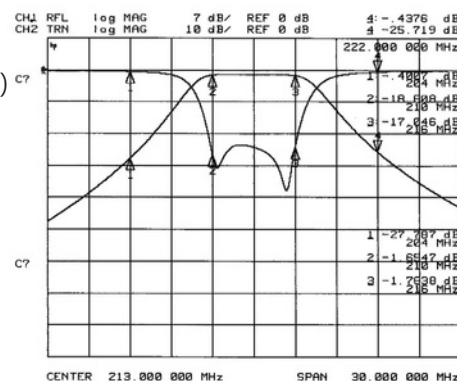
Ordering Information:

3160D(X)(Y) - (CH)

(X) = Female Connector Type
 = (No Designation) F
 = (B) BNC, (S) SMA or (N) N

(Y) = Impedance
 = (No Designation) 75 Ohm
 = (50) 50 Ohm

(CH) = channel #



Typical Frequency Response of 3160D



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3303 FM Series

FM (Wideband) Preselectors

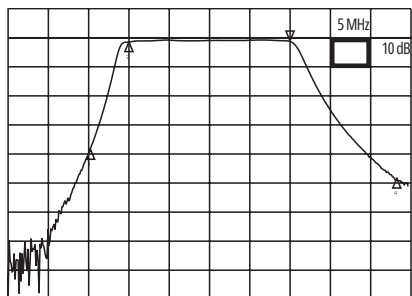
3303FM Bandpass Filters



3303FM-16 & 3303FM-20

These wideband filters are used to isolate the FM band from reception of VHF, paging and other potentially interfering off-air sources.

<i>Specifications:</i>	<i>3303FM-16</i>	<i>3303FM-20</i>
Passband	92-108 MHz	88-108 MHz
Insertion Loss	1.5 dB Max	1.5 dB Max
Rejection at 87.75 MHz	25 dB Min	3 dB Max
Rejection at 83.25 MHz	50 dB Min	30 dB Typ
Rejection at 121.25 MHz	50 dB Min	50 dB Typ
Return Loss	14 dB Min	14 dB Min



Typical Frequency Response of
3303FM-20

Mechanical Specifications:

Baseplate Dimensions: 10.25" x 1.5"
Rack Mount Available Upon Request
Connectors: F-female (Std.); N, SMA or BNC-female (Opt.)
Impedance: 75 Ohm (Std.); 50 Ohm (Opt.)

Ordering Information:

3303FM(X)(Y) - (BW)
(X) = Female Connector Type
= (No Designation) F
= (B) BNC, (S) SMA or (N) N

(Y) = Impedance
= (No Designation) 75 Ohm
= (50) 50 Ohm

(BW) = Receive Bandwidth
= (16) 16 MHz
= (20) 20 MHz



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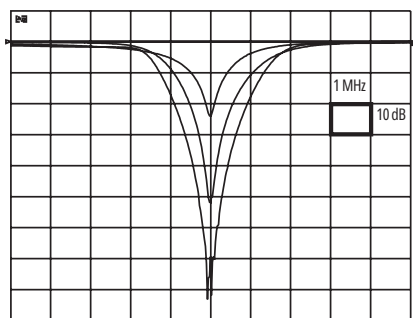
FM Tunable Notch Filters

6367 Series

6367 Single Cavity Tunable Notch Filters



6367



Typical Frequency Response
of F6367-3, FD6367-3, FT6367-
3

6367 Series

Model 6367 is easily tuned through its full frequency range. A second control allows adjusting the 3 dB bandwidth over a wide range. The adjustable bandwidth feature of these filters allows suppression of an unwanted carrier with minimum impact on adjacent, desired frequencies.

Cascade It For A Deeper Notch

For spot frequency applications, two or three identical units may be cascaded to produce a notch twice or three times as deep with the similar 3 dB bandwidth. Be sure to complete the model number by inserting the desired bandwidth.

Model #	50 Ohm Notch Depth (dB)**	75 Ohm Notch Depth (dB)**	Notch Depth Height (L-inches)	Tuning Range** (MHz)
6367-2 23 26			4.500	50-108
**With 3 dB bandwidth adjusted to 3 MHz				

Mechanical Specifications:

Baseplate Dimensions: 2" x 2" (single), 5" x 2" (double), 7" x 2" (triple)

Rack Mount Available Upon Request

Connector Options: 50 ohm-Type N, SMA or BNC
75 ohm-Type F

Ordering Information:

(X)(Y)6367-(Fo)/(BW3)

(X) - designates the connector type

Connectors: 50 ohm - BNC (B)
SMA (S)
Type N (N)
75 ohm - Type F (F)

(Y) - designates number of cavities

Cavities: (D) Double
(T) Triple

(Fo) - designates the notch frequency (MHz)

(BW3) - designates the 3 dB bandwidth (MHz)

Note: Orders for double and triple cavity 6367's must specify notch frequency and 3 dB bandwidth.



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Constructed with aluminum housings, high conductivity resonator and an invar tuning rod, the notch filters have excellent power handling capabilities and temperature stability.

Custom designs are also available.



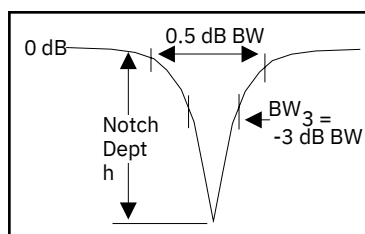
96xx -(Fo)(# sections)(BW)³
Fo = Notch frequency

Freq. Range (MHz)	9603 3"x3"	9604 4"x4"	9607 7" Dia.	9610 10" Dia	9612 12" Dia.
30 - 200					
200 - 300					
300 - 406					
406 - 512					
512 - 700					
700 - 950					

BandwidthUp to 3% (bandwidth/center frequency)
Return Loss14 dB Min
Power Rating350 watts w/0.5 dB insertion loss
250 watts w/1.0 dB insertion loss
100 watts w/2.0 dB insertion loss
Temperature stability0 .0005 MHz/°C
Approx. sizeDiameter x 1/4 wave length
ConnectorsType N Female (50 ohms)

0.5 dB BANDWIDTH

Single Cavity	3.0 x BW ³
Double Cavity	3.0 x BW ³
Triple Cavity	3.0 x BW ³



NOTCH DEPTH - dB

	9603	9604	9607	9610	9612
Single Cavity	20Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{3} \frac{00(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{3}{3} \frac{80(BW)}{\sqrt{F_o}} \right]$	20Log $\left[\frac{4}{3} \frac{60(BW)}{\sqrt{F_o}} \right]$
Double Cavity	40Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{3} \frac{00(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{3}{3} \frac{80(BW)}{\sqrt{F_o}} \right]$	40Log $\left[\frac{4}{3} \frac{60(BW)}{\sqrt{F_o}} \right]$
Triple Cavity	60Log $\left[\frac{1}{3} \frac{20(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{1}{3} \frac{85(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{3} \frac{00(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{3}{3} \frac{80(BW)}{\sqrt{F_o}} \right]$	60Log $\left[\frac{4}{3} \frac{60(BW)}{\sqrt{F_o}} \right]$



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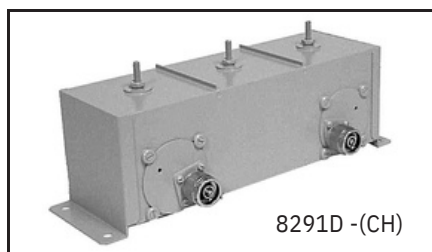
MICROWAVE FILTER COMPANY'S

VHF TRANSMIT

POPULAR OPTIONS

Model	Application	Description	Page Number
8088	VHF Transmit	Special Contact MFC	Call
8089	VHF Transmit	Special Contact MFC	Call
8233	VHF Transmit	Special Contact MFC	Call
8234	VHF Transmit	Special Contact MFC	Call
8241	VHF Transmit	Bandpass Filter	39
8603	VHF Transmit	Bandpass Filter	39
9393	VHF Transmit	Bandpass Filter	40
9494	VHF Transmit	Bandpass Filter	40
9507	VHF Transmit	Bandpass Filter	40
9510	VHF Transmit	Bandpass Filter	40
9512	VHF Transmit	Bandpass Filter	40
9603	VHF Transmit	Notch Filter	41
9604	VHF Transmit	Notch Filter	41
9607	VHF Transmit	Notch Filter	41
9610	VHF Transmit	Notch Filter	41
9612	VHF Transmit	Notch Filter	41
16691	VHF Transmit	Bandpass Filter	42

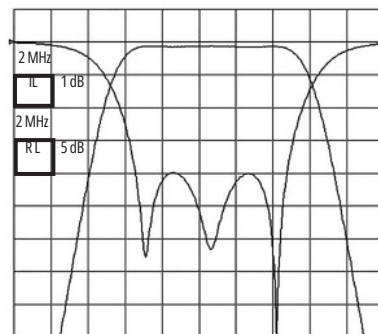
DTV (UHF & VHF) Channel Transmit Bandpass Filters



8291D -(CH)

These DTV bandpass filters are installed at the transmitter output to suppress out-of-band emissions which may interfere with other channels. They feature low loss to maximize station coverage. Special bandpass filters can be designed to meet your specific needs.

- 50 ohm Impedance
- N Female Connectors, except:
Model 6464D (7/8" EIA)
Model 18030 (1 5/8" EIA)

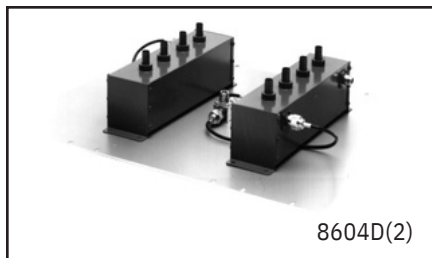


Typical Frequency Response of 17494

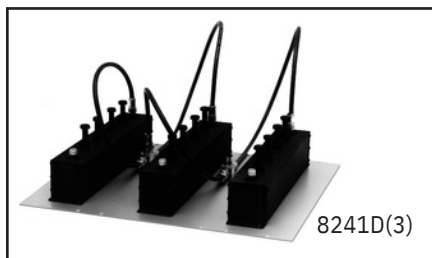
Specifications:

	8603D-(CH)	8241D-(CH)	8291D -(CH)	17494-(CH)	6464D -(CH)	18030-(CH)
Available	DTV (2-6)	DTV (7-13)	DTV (14-51)	DTV (14-51)	DTV (14-51)	DTV (14-51)
Channels Channel Insertion	1 dB Max	1 dB Max	1 dB Max	1 dB Max	0.75 dB Max	0.75 dB Max
Loss	20 dB Min	20 dB Min	15 dB Typ	20 dB Min	20 dB Min	20 dB Min
Selectivity (Relative to Channel Center)	± 9.0 MHz	± 9.0 MHz	± 9.0 MHz	± 9.75 MHz	± 9.0 MHz	± 9.0 MHz
Channel VSWR	1.2:1 Max	1.2:1 Max	1.2:1 Max	1.2:1 Max	1.25:1 Max	1.25:1 Max
Power Rating	250 Watts Max	100 Watts Max	250 Watts Max	500 Watts Max	1 kW Max	2.5 kW Max

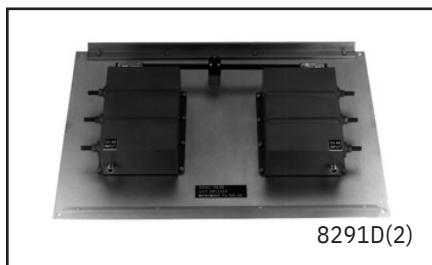
DTV (UHF & VHF) Channel Transmit Combiners



8604D(2)



8241D(3)



8291D(2)

VHF Channels 2-13 & UHF Channels 14-51

These combiners connect multiple channel transmitters to a common tower transmission line. Special combiners can be designed for your application.

Specifications:

	8604D (*)	8241D (*)	8291D (*)	17494 (*)	6464D (*)
Channels	DTV (2-6)	DTV (7-13)	DTV (14-51)	DTV (14-51)	DTV (14-51)
Max Number of channels combined	3	3	15	8	8
Loss (Max)	1 dB	1 dB	1 dB	1 dB	0.75 dB
Selectivity (Relative to Channel Center)	20 dB Min ± 9 MHz	20 dB Min ± 9 MHz	15 dB Min ± 9 MHz	20 dB Min ± 9.75 MHz	20 dB Min ± 9 MHz
Power Rating Max (Per Channel)	250 Watts	100 Watts	250 Watts	500 Watts	1 kW
Channel VSWR Max	1.33:1	1.33:1	1.33:1	1.33:1	1.33:1
Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Input Connectors	N Female	N Female	N Female	N Female	7/8" EIA
Antenna Connectors	N Female	N Female	N Female	1 5/8" EIA	1 5/8" EIA

(*) = Number of channels to be combined



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DTV (VHF-H) Tunable Channel Mask Filter

Model 16691

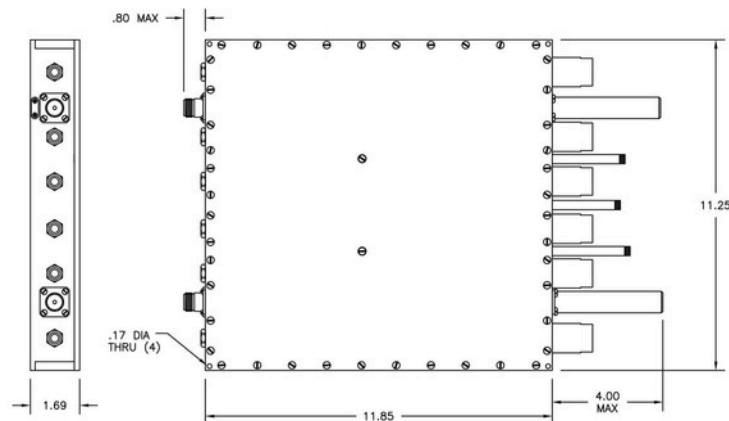
This tunable bandpass filter suppresses out-of-band emissions in conformance with FCC digital mask requirements for VHF-H single channel broadcasts.

Model 16691

Specifications	
Available Channels (Tunable)	DTV (7 - 13)
Channel Insertion Loss	1.65 dB Max
Channel VSWR.	1.14:1 Max
Group Delay Variation	150 nS Max
Selectivity (Relative to Channel Center)	6 dB Min +/- 3.5 MHz 24 dB Min +/- 6 MHz 36 dB Min +/- 9 MHz
Power Rating (CW)	250 Watts Max
Impedance	50 Ohms
Standard Connectors	N Female



Alternate Connectors are Available Upon Request



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MICROWAVE FILTER COMPANY'S

STL-L BAND POPULAR OPTIONS

Model	Application	Description	Page Number
6556 Series	STL-L Band	Notch Filter	44
8855 Series	STL-L Band	Notch Filter	45
9393	STL-L Band	Bandpass Filter	46
9494	STL-L Band	Bandpass Filter	46
9507	STL-L Band	Bandpass Filter	46
9510	STL-L Band	Bandpass Filter	46
9512	STL-L Band	Bandpass Filter	46
9603	STL-L Band	Notch Filter	47
9604	STL-L Band	Notch Filter	47
9607	STL-L Band	Notch Filter	47
9610	STL-L Band	Notch Filter	47
9612	STL-L Band	Notch filter	47

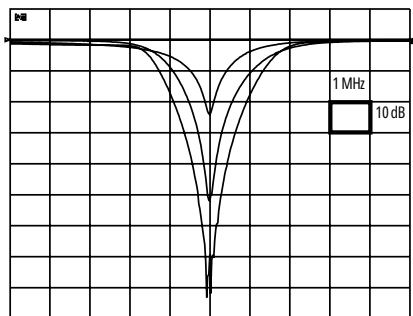


Narrow Notch Filters

6556 Custom Built To Frequency



6556



Typical notch loss for one, two and three cavity assemblies for 3 dB bandwidth = 5 MHz.

6556 Series

These notch filters are cut to your specified frequency (Fo). The 6556 can be used to notch out an undesired carrier or to notch out Terrestrial Interference in the block band of your headend TVRO. They are fine tunable and are available as one, two or three cavity assemblies to give the notch loss required.

Specifications:

Notch Frequency Option (Fo)900-1450 MHz

3 dB Bandwidth Option1-5 MHz

(3 MHz Standard)

Notch Loss16 dB Min for 3 dB BW of 3 MHz

Mechanical Specifications:

Baseplate Dimensions: 2" x 2" (single), 5" x 2" (double), 7" x 2" (triple) Rack Mount Available Upon Request

Connector Options: 50 ohm-Type N, SMA or BNC
75 ohm-Type F

Ordering Information:

(X)(Y)6556-Fo)/(BW3)

(X) - designates the connector type

Rack Mount Available Upon Request

Connectors: 50 ohm - BNC (B)

SMA (S)

Type N (N)

75 ohm - Type F (F)

(Y) - designates number of cavities

Cavities: (D) Double

(T) Triple

(Fo) - designates the notch frequency (MHz)

(BW3) - designates the 3 dB bandwidth (MHz)

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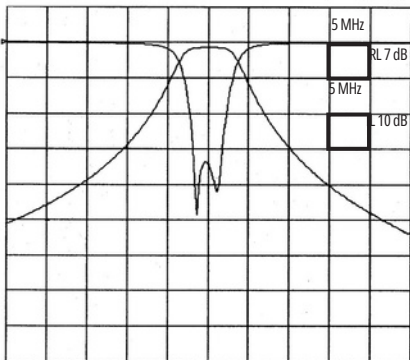
Studio To Transmitter Link (STL) Bandpass Filter



The series 8855 bandpass filter is used to eliminate interference in STL receivers caused by other nearby transmitters, such as cellular.

Specifications:

Center Frequency Option (Fo)900-960 MHz
 Passband Bandwidth5 MHz
 Passband Return Loss14 dB Min
 Passband Insertion Loss2 dB Max
 Power Rating1 Watt Max
 20 dB RejectionFo±10 MHz
 30 dB RejectionFo±20 MHz



Typical Frequency Response of 8855

Mechanical Specifications:

Baseplate Dimensions: 5.2" x 2.4"
 Rack Mount Available Upon Request
Connector Option: 50 ohm-Type N, SMA or BNC-female

Ordering Information:

8855(X)(Y)-

(Fo) (X) - designates connector type BNC(B), SMA(S), N or F

(Y) - designates impedance (ohms) (50) or (75)

(Fo) - center frequency (MHz)



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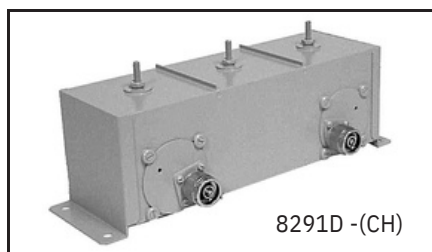
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MICROWAVE FILTER COMPANY'S

UHF/VHF CANNEL COMBINERS POPULAR OPTIONS

Model	Application	Description	Page Number
8604	UHF/VHF Combiners	Bandpass Filter	49
8241	UHF/VHF Combiners	Bandpass Filter	49
8291	UHF/VHF Combiners	Bandpass Filter	49
6464	UHF/VHF Combiners	Bandpass Filter	49

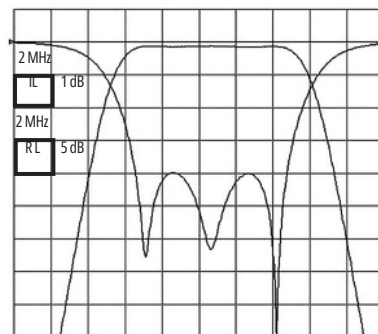
DTV (UHF & VHF) Channel Transmit Bandpass Filters



8291D -(CH)

These DTV bandpass filters are installed at the transmitter output to suppress out-of-band emissions which may interfere with other channels. They feature low loss to maximize station coverage. Special bandpass filters can be designed to meet your specific needs.

- 50 ohm Impedance
- N Female Connectors, except:
Model 6464D (7/8" EIA)
Model 18030 (1 5/8" EIA)

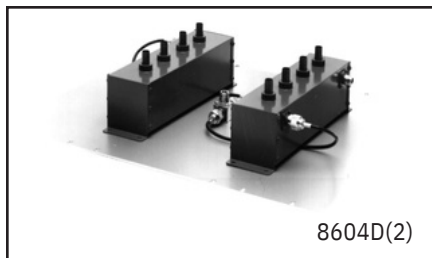


Typical Frequency Response of 17494

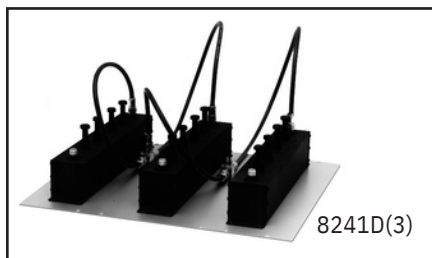
Specifications:

	8603D-(CH)	8241D-(CH)	8291D -(CH)	17494-(CH)	6464D -(CH)	18030-(CH)
Available	DTV (2-6)	DTV (7-13)	DTV (14-51)	DTV (14-51)	DTV (14-51)	DTV (14-51)
Channels Channel Insertion	1 dB Max	1 dB Max	1 dB Max	1 dB Max	0.75 dB Max	0.75 dB Max
Loss	20 dB Min	20 dB Min	15 dB Typ	20 dB Min	20 dB Min	20 dB Min
Selectivity (Relative to Channel Center)	± 9.0 MHz	± 9.0 MHz	± 9.0 MHz	± 9.75 MHz	± 9.0 MHz	± 9.0 MHz
Channel VSWR	1.2:1 Max	1.2:1 Max	1.2:1 Max	1.2:1 Max	1.25:1 Max	1.25:1 Max
Power Rating	250 Watts Max	100 Watts Max	250 Watts Max	500 Watts Max	1 kW Max	2.5 kW Max

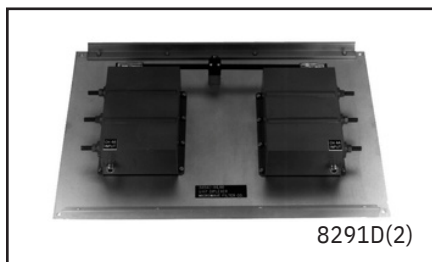
DTV (UHF & VHF) Channel Transmit Combiners



8604D(2)



8241D(3)



8291D(2)

VHF Channels 2-13 & UHF Channels 14-51

These combiners connect multiple channel transmitters to a common tower transmission line. Special combiners can be designed for your application.

Specifications:

	8604D (*)	8241D (*)	8291D (*)	17494 (*)	6464D (*)
Channels	DTV (2-6)	DTV (7-13)	DTV (14-51)	DTV (14-51)	DTV (14-51)
Max Number of channels combined	3	3	15	8	8
Loss (Max)	1 dB	1 dB	1 dB	1 dB	0.75 dB
Selectivity (Relative to Channel Center)	20 dB Min ± 9 MHz	20 dB Min ± 9 MHz	15 dB Min ± 9 MHz	20 dB Min ± 9.75 MHz	20 dB Min ± 9 MHz
Power Rating Max (Per Channel)	250 Watts	100 Watts	250 Watts	500 Watts	1 kW
Channel VSWR Max	1.33:1	1.33:1	1.33:1	1.33:1	1.33:1
Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Input Connectors	N Female	N Female	N Female	N Female	7/8" EIA
Antenna Connectors	N Female	N Female	N Female	1 5/8" EIA	1 5/8" EIA

(*) = Number of channels to be combined



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