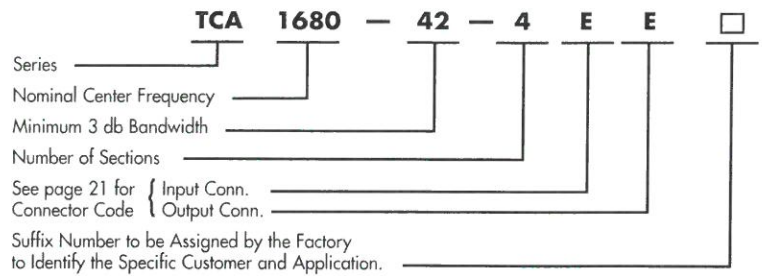
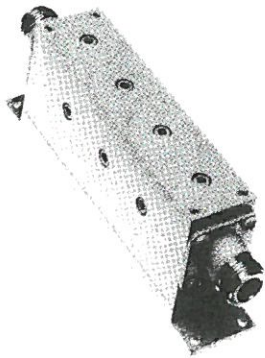


The specifications for the example shown here are as follows:
 This model is a fixed frequency cavity bandpass filter. It has a nominal center frequency of 1680 MHz and a minimum 3 db relative bandwidth of 42 MHz. The maximum insertion loss at 1680 MHz is 0.47 db (see page 20). The nominal input and output impedance is 50 ohms. The maximum VSWR at center frequency is 1.5:1. From Table 1, 0.8 x 42 MHz (minimum 3 db bandwidth) is 33.6 MHz for a VSWR of 1.5:1 or less from 1663.2 MHz to 1696.8 MHz.



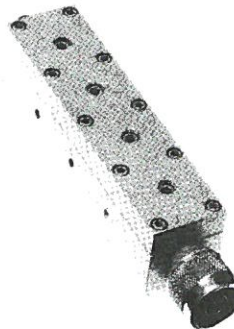
SERIES TCA
 ■ 1.0 to 3.0 GHz
 ■ Coaxial 1/4"- wavelength resonators
 ■ Bored aluminum block



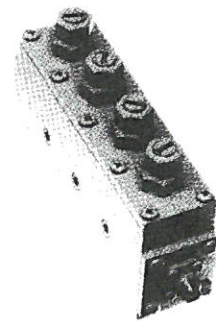
SERIES TCG
 ■ 2.0 to 6.0 GHz
 ■ Coaxial 1/4"- wavelength resonators
 ■ Bored aluminum block



SERIES TCH
 ■ 6.0 to 12.0 GHz
 ■ TM010 resonant cavity
 ■ Bored aluminum block



SERIES TCB
 ■ 1.0 to 2.4 GHz
 ■ Coaxial 1/4"- wavelength resonators
 ■ Adjustable center frequency
 ■ Bored aluminum block



TCA	TCG	TCH	TCB
1.0 to 3.0 GHz (See Note 1)	2.0 to 6.0 GHz (See Note 1)	6.0 to 12.0 GHz (See Note 1)	1.0 to 2.4 GHz Tuning Range up to 10% (See Note 1)
0.8 to 4.0 GHz	1.0 to 6.0 GHz	6.0 to 12.0 GHz (See Note 1)	1.0 to 3.0 GHz
0.3% to 3.0% (See Note 1)	0.3% to 2.0% (See Note 1)	0.1% to 1.0% (See Note 1)	0.3% to 3.0% (See Note 1)
0.2% to 3.5%	0.2% to 3.0%	0.1% to 2.0% (See Note 1)	0.2% to 3.5%
Spl. Requirements (See page 7)	Spl. Requirements (See page 7)	Spl. Requirements (See page 7)	Spl. Requirements (See page 7)
See page 20	See page 20		
Spl. Requirements	Spl. Requirements	Spl. Requirements (See page 20)	Spl. Requirements (See page 20)
50 ohms	50 ohms	50 ohms	50 ohms
60 ohms			60 ohms
1.5:1	1.5:1 to 4 GHz 2.0:1 to 6 GHz	2.0:1	1.5:1
1.2:1		1.5:1	
See Table 1	See Table 1		See Table 1
Spl. Requirements (See page 7)	Spl. Requirements (See page 7)	Spl. Requirements (See page 7)	Spl. Requirements (See page 7)
See Page 20	See Page 20	See Page 20	See Page 20
Spl. Requirements	Spl. Requirements	Spl. Requirements	Similar to TCA
2 to 6	2 to 6	2 to 4	2 to 4
up to 10	up to 10	1 to 8	
See Peak	See Peak	10% of Peak	See Peak
15 to 150	15 to 150	5 to 200	2 to 150
1500 (3 dB rel. bw MHz)	1500 (3 dB rel. bw MHz)	15,000 (3 dB rel. bw MHz)	1,000 (3 dB rel. bw MHz)
(Fc MHz)	(Fc MHz)	(Fc MHz)	(Fc MHz)
45 to 300	45 to 300	100 to 5000	2 to 300
25G	25G	25G	5G
75G	75G	150G	15G
10G	10G	10G	5G
30G	30G	60G	10G
Up to 90%	Up to 90%	Up to 90%	Up to 90%
up to 100% with Condensation	up to 100% with Condensation	up to 100% with Condensation	up to 100% with Condensation
Unlimited	Unlimited	Unlimited	Unlimited
0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
-54°C to +125°C	-54°C to +125°C	-54°C to +125°C	-54°C to +125°C
75G	75G	75G	5G
150G	150G	300G	25G
30G	30G	30G	5G
60G	60G	120G	15G
-54°C to +100°C	-54°C to +100°C	-54°C to +100°C	-54°C to +100°C
-62°C to +150°C	-62°C to +150°C	-62°C to +150°C	-62°C to +150°C

*Submit specific requirements for quotation

CAVITY BANDPASS FILTERS

OUTLINE DRAWINGS

TSF

TCF

TCC

<p>CONNECTORS: See table 2, below.</p> <p>Finish: Light Blue Paint or Lacquer</p>			
	<p>FREQUENCY "L" "X"</p> <p>30 to 50 MHz — 3 7/8" — 2.625</p> <p>50 to 60 MHz — 2 7/8" — 1.625</p> <p>60 to 100 MHz — 2 3/8" — 1.125</p> <p>100 to 400 MHz — 1 7/8" — 1.125</p>	<p>FREQUENCY "L" "X"</p> <p>400 to 600 MHz — 4 7/8" — 3.625</p> <p>600 to 900 MHz — 3 7/8" — 2.625</p> <p>900 to 1400 MHz — 2 7/8" — 1.625</p> <p>1400 to 1800 MHz — 2 3/8" — 1.125</p> <p>1800 to 3000 MHz — 1 7/8" — 1.125</p>	
<p>MECHANICAL SPECIFICATIONS</p>			
<p>Approx. Weight in oz.</p>	.8 LW + 3.5	.8 LW + 4	2 LW + 6
<p>"L" Dimension</p>	See Chart	See Chart	[2.4 / Fc GHz] + .750 approx.
<p>"W" Dimension</p>	1/4 + [1 1/8 x (No. of Sect.)]	1/4 + [1 1/8 x (No. of Sect.)]	3/16 + [1 7/8 x (No. of Sect.)] approx.



TCA

TCG

TCH

TCB

<p>MECHANICAL SPECIFICATIONS</p>			
LW + 4	.8 LW + 3	LW + 2	LW + 6
[2.6 / Fc GHz] + .750 (approx.)	[3.0 / Fc GHz] + .750 approx.	[9.5 (No. of Sect.) / Fc GHz] + .370 approx.	[2.6 / Fc GHz] + .750 approx.
3/16 + [15/16 x (No. of Sect.)] approx.	19/32 + [11/16 x (No. of Sect.)] approx.	[8.9 / Fc GHz] + .120 approx.	3/16 + [15/16 x (No. of Sect.)] approx.

Table 1 VSWR Bandwidth

NO. OF SECTIONS	2	3	4	5	6 OR MORE
VSWR Bandwidth					
Min. 3 db Bandwidth	0.4	0.7	0.8	0.85	0.9

Table 2 CONNECTOR CODE

*A — BNC Jack	E — N Jack	S — SMA Jack
*B — BNC Plug	F — N Plug	T — SMA Plug
C — TNC Jack		X — Special
D — TNC Plug		

* BNC Connectors not standard above 1000 MHz