

# UHF Bandpass filter, convection / liquid cooled

10 / 15 kW rms, 6 Pole, Standard

BAND IV-V

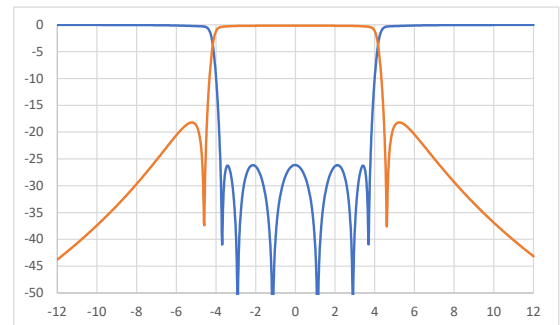
10 year GUARANTEE

## PRODUCT FEATURES

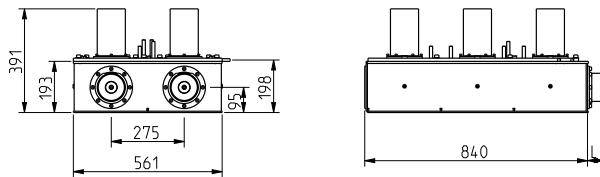
- Convection & Liquid cooled versions
- Retunable
- Compact design
- Low insertion loss
- Temperature compensated



SPECIFICATIONS	270 mm Series	
	Convection cooled	Liquid cooled
FREQUENCY	470 - 700 MHz	
BANDWIDTH	6 - 8 MHz	
STANDARD ORDER	6 Poles with single cross coupling	
OPTIONAL ORDER	6 Poles with double cross coupling or without	
ATV	Spurious suppress	
DVB	Non critical mask	
ATSC	Stringent mask	
ISDB	Non critical mask	
IMPEDANCE	50 Ohm	
VSWR	>26 dB (<1.11)	
TEMPERATURE STABILITY	< 2 kHz / °C	
MAX PRODUCT TEMPERATURE	70 °C	
ENVIROMENTAL CONDITION	-5 to 70 °C IP40	
STANDARD CONNECTION	3 1/8" unflange	
OPTIONAL CONNECTIONS	4 1/2" unflange, NAX120 unflange	
COOLING LIQUID CONNECTION	-	Ø10 mm (other upon request)
LIQUID FLOW	-	10 l/min (2.5 gal liq./min) Cooling capacity >900W
COOLING LIQUID TEMPERATURE	-	<=50°C (<=122°F)



DIMENSIONS AND WEIGHT	
DIMENSIONS	903 x 561 x 391 mm
L x W x H	(35.6 x 22.1 x 15.4 in)
WEIGHT	46 kg (101 lb)
STANDARD FRAME	Stand alone
OPTIONAL FRAME	Custom frame
COLOUR	Frosted black



## ARTICLE: BPF46C27C-1P33

- BPF** = Filter type  
**4** = Frequency band  
**6** = Number of poles  
**C** = Cavity based  
**27** = Cavity size  
**C** = Version  
  
**1** = Number of cross coupling  
 0 = without, 1 = single, 2 = double  
**P** = Coating and cooling  
 V = blackpainted, liquid cooled  
 P = blackpainted, convection cooled  
**3** = Input connection  
 3 = 3 1/8" unflange, 4 = 4 1/2" unflange,  
 2 = NAX120 unflange  
**3** = Output connection  
 3 1/8" unflange, 4 = 4 1/2" unflange,  
 2 = NAX120 unflange

TYPICAL DATA*	8 MHz DVB-T2		6 MHz ISDB-T		6 MHz ATSC	
ARTICLE NO	BPF46C27C-1Pxx		BPF46C27C-1Pxx		BPF46C27C-1Pxx	
<b>INSERTION LOSS</b>	470 MHz	700 MHz	470 MHz	700 MHz	470 MHz	700 MHz
Avg. signal bandwidth	<0.20 dB	<0.26 dB	<0.26 dB	<0.33 dB	<0.24 dB	<0.31 dB
Centre frequency	<0.15 dB	<0.20 dB	<0.22 dB	<0.28 dB	<0.23 dB	<0.29 dB
Signal band edge	± 3.88 MHz	<0.48 dB	± 2.79 MHz	<0.15 dB	± 2.69 MHz	<0.08 dB
Rejection Δ-f0	± 4.2 MHz	>4 dB	± 3.15 MHz	-	± 3.5 MHz	-
		typical >4.5 dB		typical >0.5 dB		typical >1.0 dB
Rejection Δ-f0	± 6.0 MHz	>16 dB	± 4.5 MHz	>17 dB	± 6.0 MHz	>29 dB
		typical >20 dB		typical >30 dB		typical >39 dB
Rejection Δ-f0	± 12.0 MHz	>41 dB	± 9.0 MHz	>47 dB	± 9.0 MHz	>63 dB
		typical >42 dB		typical >50 dB		typical >67 dB
<b>GROUP DELAY</b>	<320 ns		<140 ns		<80 ns	
<b>MAX INPUT POWER RATING, LIQUID COOLING**</b>	15 kW	15 kW	15 kW	15 kW	15 kW	15 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		@ 11 dB (crest factor)	
<b>MAX INPUT POWER RATING, CONVECTION COOLING***</b>	12.7 kW	10.0 kW	10 kW	7.9 kW	10.5 kW	8.2 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		11 dB (crest factor)	
<b>TEMPERATURE RISE</b>	<4 °C/ kW	<5 °C/ kW	<5 °C/ kW	<6.3 °C/ kW	<4.8 °C/ kW	<6.1 °C/ kW
<b>MASK COMPLIANT</b>	Non critical mask		Non critical mask		Stringent mask	

\* Data in table is typical/ indicative data . To fulfil mask, transmitter shoulder level must be >36.2 dB. The filter can be tuned for other specifications or bandwidth. Please contact us for a designed specification.  
 \*\* Max input power with above cooling liquid flow and temperature. Change in the liquid flow and temperature can also change the actual power rating.  
 \*\*\* Max input power at <50 °C temp. rise and <20 °C ambient temperature. The unit must be positioned so that there are no obstructions to free air flow. Data are subjected to change without prior notice.