

UHF Bandpass filter, convection / liquid cooled

12.8 / 15 kW rms, 6 Pole, Low Loss

BAND IV-V

10 year GUARANTEE

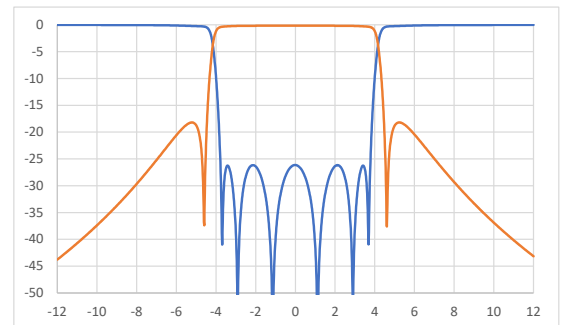
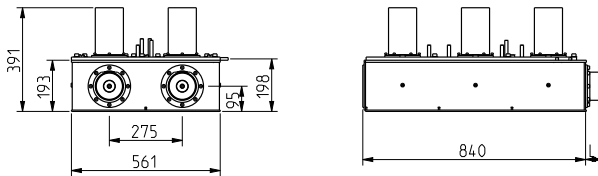
PRODUCT FEATURES

- 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	
ENVIRONMENTAL 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-1N33

- 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
N = Coating and cooling
 W = blackpainted, silver plated, liquid cooled
 N = blackpainted, silver plated, 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-1Nxx		BPF46C27C-1Nxx		BPF46C27C-1Nxx	
INSERTION LOSS	470 MHz	700 MHz	470 MHz	700 MHz	470 MHz	700 MHz
Avg. signal bandwidth	<0.17 dB	<0.20 dB	<0.21 dB	<0.26 dB	<0.20 dB	<0.24 dB
Centre frequency	<0.13 dB	<0.15 dB	<0.19 dB	<0.22 dB	<0.19 dB	<0.23 dB
Signal band edge	± 3.88 MHz	<0.41 dB	± 2.79 MHz	<0.12 dB	± 2.69 MHz	<0.07 dB
Rejection Δ-f0	± 4.2 MHz	>4 dB	± 3.15 MHz	-	± 3.5 MHz	-
		typical >4.5 dB		typical >0.4 dB		typical >0.9 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
GROUP DELAY	<320 ns		<140 ns		<80 ns	
MAX INPUT POWER RATING, LIQUID COOLING**	15 kW	15 kW	15 kW	15 kW	15 kW	15 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		@ 11 dB (crest factor)	
MAX INPUT POWER RATING, CONVECTION COOLING***	15 kW	12.8 kW	12.2 kW	10.1 kW	12.7 kW	10.5 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		11 dB (crest factor)	
TEMPERATURE RISE	<3.2 °C/kW	<3.9 °C/kW	<4.1 °C/kW	<4.9 °C/kW	<3.9 °C/kW	<4.8 °C/kW
MASK COMPLIANT	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.