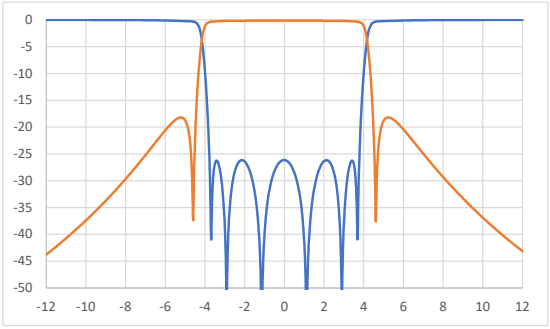
UHF Balanced Bandpass filter
Convection / liquid cooled
20 / 30 kW rms, 6 Pole, Standard

BAND IV-V

10 year GUARANTEE

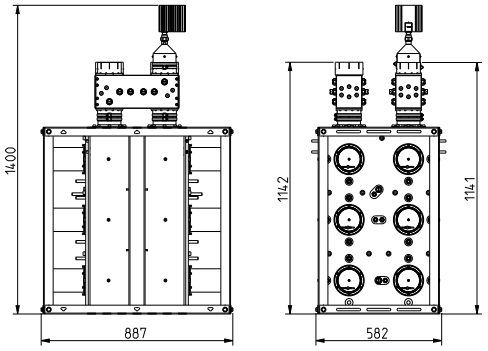
PRODUCT FEATURES

- Convection & Liquid cooled versions
- Retunable
- Compacte 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 supress	
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 L x W x H	887 x 582 x 1400 mm (34.9 x 22.9 x 55.1 in)
WEIGHT	130 kg (286 lb)
STANDARD FRAME	Stand alone
OPTIONAL FRAME	Custom frame
COLOUR	Frosted black



ARTICLE: BBPF46C27C-1P33

BBPF = 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	BBPF46C27C-1Pxx			BBPF46C27C-1Pxx			BBPF46C27C-1Pxx		
INSERTION LOSS		470 MHz	700 MHz		470 MHz	700 MHz		470 MHz	700 MHz
Avg. signal bandwidth		<0.28 dB	<0.34 dB		<0.34 dB	<0.41 dB		<0.32 dB	<0.39 dB
Centre frequency		<0.23 dB	<0.28 dB		<0.30 dB	<0.36 dB		<0.31 dB	<0.37 dB
Signal band edge	± 3.88 MHz	<0.56 dB	<0.66 dB	± 2.79 MHz	<0.23 dB	<0.28 dB	± 2.69 MHz	<0.16 dB	<0.19 dB
Rejection Δ-f0	± 4.2 MHz	>4 dB *typical >4.6 dB*	>4 dB *typical >4.8 dB*	± 3.15 MHz	- *typical >0.5 dB*	- *typical >0.6 dB*	± 3.5 MHz	- *typical >1.0 dB*	- *typical >1.0 dB*
Rejection Δ-f0	± 6.0 MHz	>16 dB *typical >20 dB*	<16 dB *typical >20 dB*	± 4.5 MHz	>17 dB *typical >30 dB*	>17 dB *typical >30 dB*	± 6.0 MHz	>29 dB *typical >39 dB*	>29 dB *typical >39 dB*
Rejection Δ-f0	± 12.0 MHz	>41 dB *typical >42 dB*	<41 dB *typical >42 dB*	± 9.0 MHz	>47 dB *typical >50 dB*	>47 dB *typical >50 dB*	± 9.0 MHz	>63 dB *typical >67 dB*	>63 dB *typical >67 dB*
GROUP DELAY	<320 ns			<140 ns			<80 ns		
MAX INPUT POWER RATING, LIQUID COOLING**	30 kW @ 13 dB (crest factor)		30 kW	30 kW @ 13 dB (crest factor)		30 kW	30 kW @ 11 dB (crest factor)		30 kW
MAX INPUT POWER RATING, CONVECTION COOLING***	25.5 kW @ 13 dB (crest factor)		20.0 kW	20.2 kW @ 13 dB (crest factor)		15.8 kW	21.0 kW 11 dB (crest factor)		16.5 kW
TEMERATURE RISE	<2 °C/ kW		<2.5 °C/ kW	<2.5 °C/ kW		<3.2 °C/ kW	<2.4 °C/ kW		<3.0 °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.