## **UHF Balanced Bandpass filter Convection / liquid cooled**

22.1 / 30 kW rms, 8 Pole, Low Loss

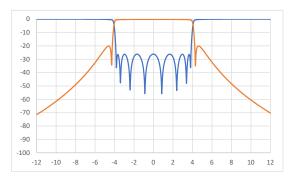
## **PRODUCT FEATURES**

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

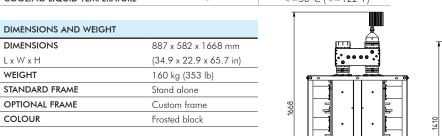
SPECIFICATIONS	270 mm Series					
	Convection cooled	Liquid cooled				
FREQUENCY	470 - 700 MHz					
BANDWIDTH	6 - 8 MHz					
STANDARD ORDER	8 Poles with single cross coupling					
OPTIONAL ORDER	8 Poles with double cross coupling or without					
ATV	Spurious supress					
DVB	Critical mask					
ATSC	Stringent mask					
ISDB	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)				

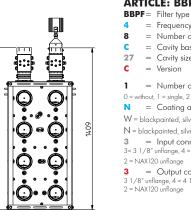






## ARTICLE: BBPF48C27C-1N33





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## = Frequency band

- = Number of poles
- = Cavity based
- = Cavity size
- = Version
- = Number of cross coupling
- without, 1 = single, 2 = double = 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 = NAX 120 unflange
- 3 = Output connection 3 1/8" unflange, 4 = 4 1/2" unflange, 2 = NAX120 unflange

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TYPICAL DATA*	8 MHz DVB-T2			6 MHz ISDB-T			6 MHz ATSC		
ARTICLE NO	BBPF48C27C-1Nxx		BBPF48C27C-1Nxx			BBPF48C27C-1Nxx			
INSERTION LOSS		470 MHz	700 MHz		470 MHz	700 MHz		470 MHz	700 MHz
Avg. signal bandwidth		<0.34 dB	<0.39 dB		<0.41 dB	<0.48 dB		<0.33 dB	<0.38 dB
Centre frequency		<0.28 dB	<0.32 dB		<0.34 dB	<0.40 dB		<0.31 dB	<0.36 dB
Signal band edge	± 3.88 MHz	<0.71 dB	<0.83 dB	± 2.79 MHz	<0.57 dB	<0.67 dB	± 2.69 MHz	<0.18 dB	<0.21 dB
Rejection ∆-f0	$\pm$ 4.2 MHz	>14 dB typical >15.6 dB	>14 dB typical >15.8 dB	± 3.15 MHz	>15 dB typical >20 dB	>15 dB typical >20 dB	± 3.5 MHz	- typical >0.6 dB	- typical >0.7 dB
Rejection ∆-f0	$\pm$ 6.0 MHz	>26 dB typical >31 dB	<26 dB typical >31 dB	$\pm$ 4.5 MHz	>31 dB typical >32 dB	>31 dB typical >32 dB	± 6.0 MHz	> <b>29</b> dB typical >42 dB	> <b>29 dB</b> typical >42 dB
Rejection ∆-f0	± 12.0 MHz	>51 dB typical >69 dB	<51 dB typical >69 dB	$\pm$ 9.0 MHz	>61 dB typical >70 dB	>61 dB typical >70 dB	$\pm$ 9.0 MHz	>63 dB typical >64 dB	>63 dB typical >64 dB
GROUP DELAY	<600 ns			<510 ns			<110 ns		
MAX INPUT POWER RATING, LIQUID COOLING**		30 kW	30 kW		30 kW	30 kW		30 kW	30 kW
	@ 13 dB (crest factor)			@ 13 dB (crest factor)			@ 11 dB (crest factor)		
MAX INPUT POWER RATING, CONVECTION COOLING***		26.7 kW	22.1 kW		20.9 kW	17.3 kW		27.3 kW	22.6 kW
	@ 13 dB (crest factor)			@ 13 dB (crest factor)			11 dB (crest factor)		
TEMERATURE RISE		<1.9 °C/ kW	<2.2 °C/ kW		<2.4 °C/ kW	<2.9 °C/ kW		<1.8 °C/ kW	<2.2 °C/ kW
MASK COMPLIANT	Critical mask			Critical mask		Stringent mask			

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\* 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.