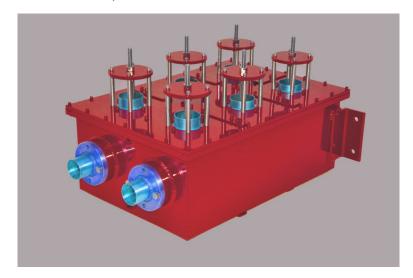


## **6-SECTION UHF 5.0 kW MASK FILTER**

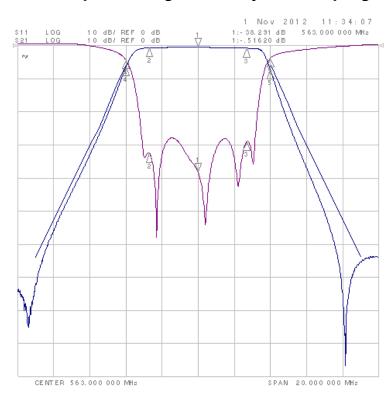
(The 4-Section Unit and the 8-Section Unit are also available upon request)



The P-Cube Mask Filter is full-band tunable with a 6-section, cross-coupled response, making it suitable for Stringent or Full-service ATSC Masks and the Non-Critical ISDB-T Mask.

P-Cube's dedicated technical staff will help you choose the right filter options for your application.

### Filter Response: Single, Non-adjacent Coupling



### **FEATURES**

- Full-band Tunability (470 650MHz)
- Temperature-compensated Resonators
- For ATSC Simple, Stringent or Full-service Masks
- Ideal for use in Channel Combiners
- Aluminum Outer with Silver-plated Copper Resonators
- One or two Non-adjacent Couplings available

### **SPECIFICATIONS**

INPUT PWR RATING	5.0 kW avg.	
ATTENUATION ATSC Stringent Mask		
ATSC Full-Service Mask ISDB-T Non-Critical Mask	See Chart on pg. 2	
CONNECTORS	1-5/8" or 7/8" EIA flanged	
DIMENSIONS		
6-sections	18" x 26" x 16" (approx.) Height includes probes	
WEIGHT		
6-sections	95 lbs. (43 kg) approx.	



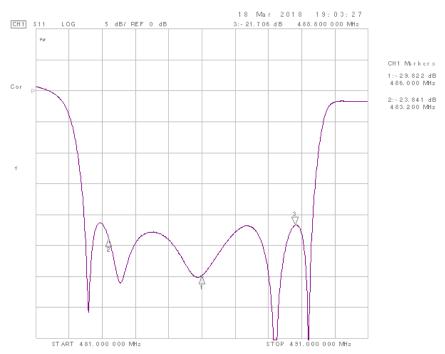
email: spencer@pcube207.com



# 5.0 kW, 6-SECTION MASK FILTER SPECIFICATIONS

MASK REQUIREMENTS	ATSC STRINGENT MASK	ATSC FULL-SERVICE MASK	ISDB-T NON-CRITICAL MASK
FILTER TYPE	6-section, cross-coupled	6-section, cross-coupled	6-section, cross-coupled
INPUT VSWR	< 1.15 : 1 over Fc ±2.69 MHz	< 1.15 : 1 over Fc ±2.69 MHz	1.2 : 1 or better over Fc ±2.79 MHz
INSERTION LOSS	< 0.40 dB at Fc	< 0.40 dB at Fc	< 0.35 dB at Fc
(At CH 30)	< 1.10 dB at Fc ±2.69 MHz	< 1.10 dB over Fc 2.69 MHz	< 1.35 dB at Fc ±2.79 MHz
Loss is lower at lower channels			
ATTENUATION	> 5.90 dB at Fc ±4.0 MHz > 11.7 dB at Fc ±4.5 MHz > 18.0 dB at Fc ±5.0 MHz > 25.0 dB at Fc ±5.5 MHz > 30.0 dB at Fc ±6.0 MHz > 30.0 dB at Fc ±9.0 MHz	> 5.90 dB at Fc ±4.0 MHz > 11.7 dB at Fc ±4.5 MHz > 18.0 dB at Fc ±5.0 MHz > 25.0 dB at Fc ±5.5 MHz > 30.0 dB at Fc ±6.0 MHz > 64.0 dB at Fc ±9.0 MHz	> 2.0 dB at Fc ±3.15 MHz > 20.0 dB at Fc ±4.5 MHz > 40.0 dB at Fc ±9.0 MHz
GROUP DELAY VARIATION	< 200 nsec over Fc ±2.69 MHz	< 200 nsec over Fc ±2.69 MHz	< 350 nsec over Fc ±2.79 MHz

## Return Loss: Dual, Non-adjacent Couplings



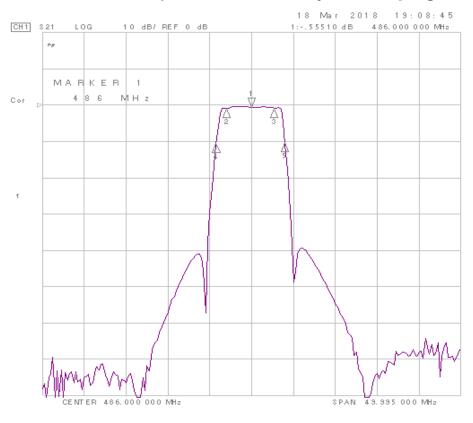
email: spencer@pcube207.com



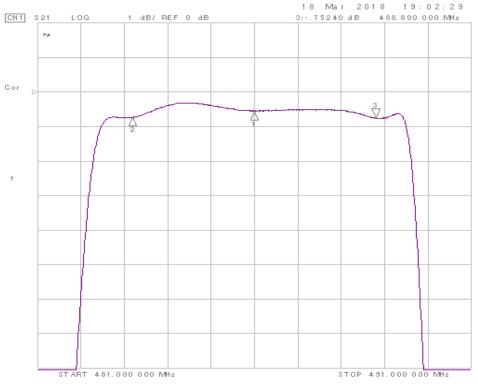


## **6-SECTION UHF 5.0 kW MASK FILTER**

### Filter Response: Dual, Non-adjacent Couplings



CH1 Markers 2:-.77050 dB 483.015 MHz 3:-.72040 dB 488.650 MHz 4:-10.503 dB 481.765 MHz 5:-10.169 dB 489.974 MHz



email: spencer@pcube207.com

CH1 Markers 1:-.55200 dB 486.000 MHs 2:-.72870 dB 483.200 MHs