

# SPECIFICATION

## COMMERCIALY AVAILABLE

**CERAMIC BAND PASS**  
**PART NUMBER: CF-47006305**  
**RoHS**

ISSUED / REVISION	ENGINEER APPROVED	DOCUMENT CHECKED	DRAFTSMAN	DOCUMENT CHECKED
5/5/15 <sup>(kn)</sup>				

***FILTRONETICS Inc***

## 1. APPLICATION

THIS SPECIFICATION APPLIES TO A BAND PASS FILTER, USING DIELECTRIC RESONATORS.

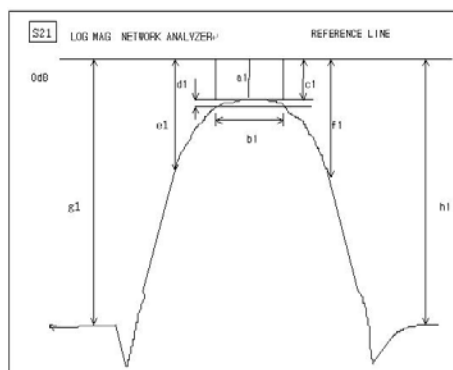
## 2. PART NUMBER:

PART NO	CF-47006305
PACKAGING	PLASTIC TRAY

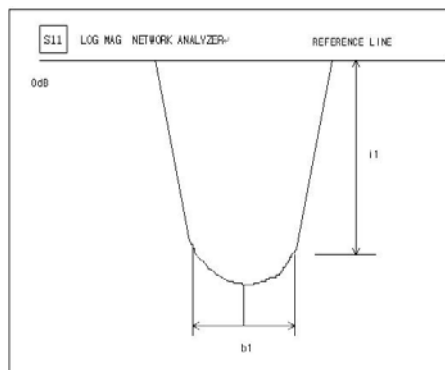
## 3. SPECIFICATIONS:

NO	ITEMS	Ref.	SPECIFICATION
1	Center Frequency (Fo)	a1	4700 MHz
2	Pass Band Width (=PB)	b1	Fo+/-315 MHz
3	Insertion Loss AT Fo	a1	1.9 dB Max
4	Return Loss IN Fo+/-90MHz	-	10dB Min
5	Attenuation [absolute value]	At 4000 MHz	40 dB Min
		At 600 MHz	50 dB Min
6	Group Delay Variation In PB	-	10nsec Max
7	Impedance	-	50Ω
8	Maximum Input Power	-	1 W (+30dBm)
9	Operating Temperature Range	-	-35 ~ +85°C

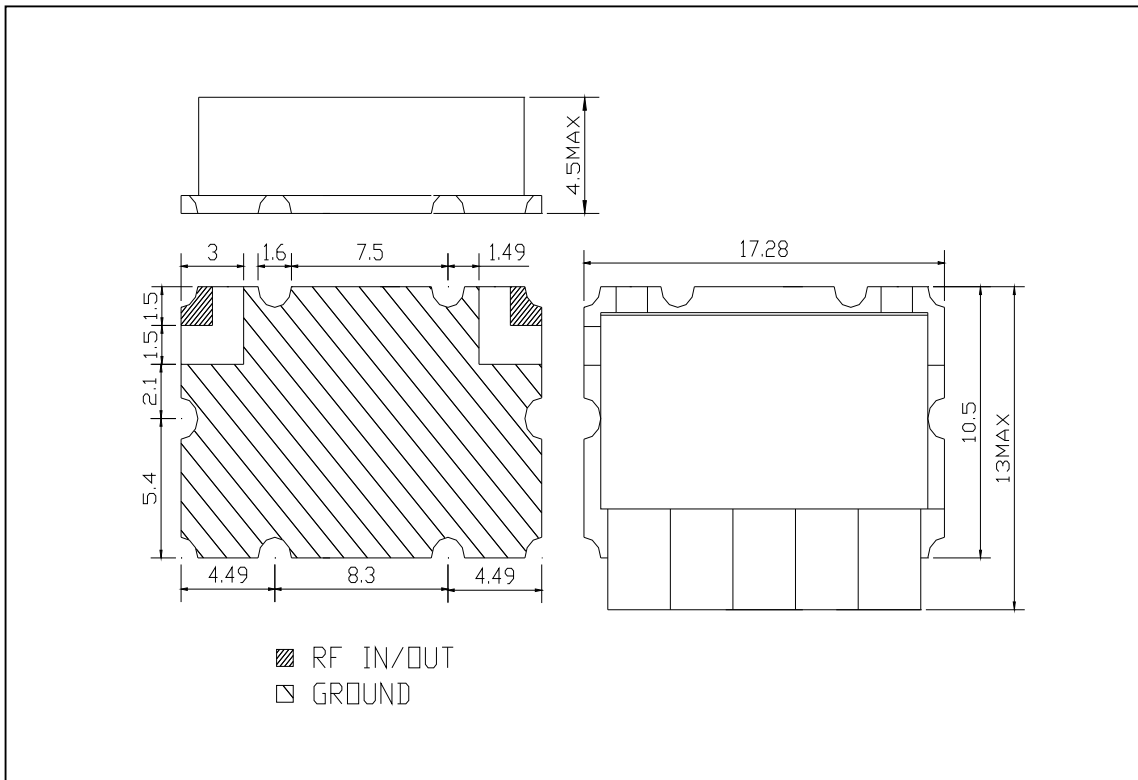
**S21 LOG MAG NETWORK ANALYZER**



**S11 LOG MAG NETWORK ANALYZER**



**4. DIMENSIONS:**



**MATERIAL SPECIFICATION**

1. PCB
  - 1) MATERIAL: FR4
  - 2) TERMINALS: Au PLATED
1. METAL CASE
  - 1) COVER MATERIAL: Brass ( Sn OR Ni PLATED)
2. RESONATOR : Dielectric Resonator
  - 1) COATING MATERIAL: Ag
  - 2) Number of Poles : 5 Poles
3. ROHS Compliant.

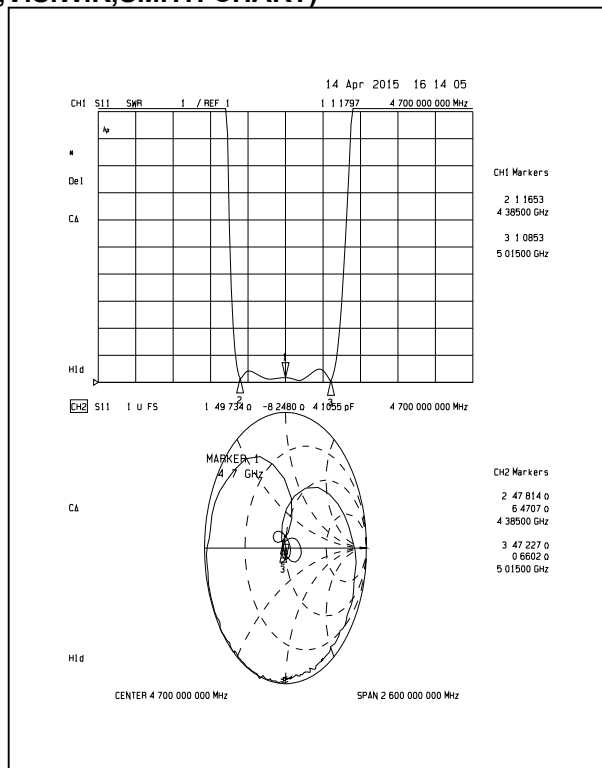
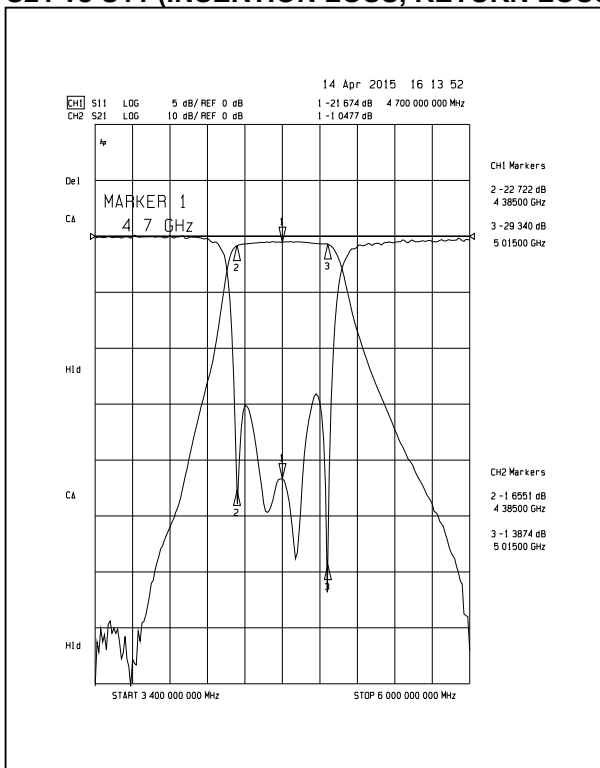
UNIT: MM  
 TOLERANCE: +/-0.5MM  
 IN/OUT LAND : +/-0.3MM  
  
 LABEL MARKING  
 CF-47006305  
 Date Code

**CAUTIONS:**

1. When handling products, be careful not to damage the outer-electrode.
2. When handling products be careful not to touch the outer-electrode with bare hands or solderability is reduced.
3. Do not apply excessive pressure or shock to product in handling or in transportation or damage to the ceramic filters may result.

### 5. GRAPHS

#### S21 vs S11 (INSERTION LOSS, RETURN LOSS, V.S.W.R, SMITH CHART)



#### S21 (GROUP DELAY , ATTENUATION)

