

# SPECIFICATION

## COMMERCIALY AVAILABLE

**CERAMIC BAND PASS**  
**PART NUMBER: CF-06000203**

ISSUED / REVISION	ENGINEER APPROVED	DOCUMENT CHECKED	DRAFTSMAN	DOCUMENT CHECKED
8/10/15 <sup>(kn)</sup>				

***FILTRONETICS Inc***

## 1. APPLICATION

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

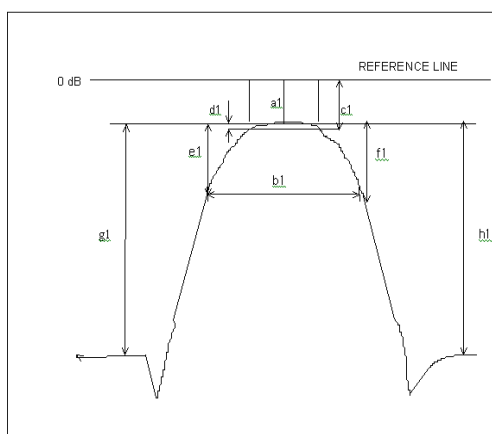
## 2. PART NUMBER:

PART NO	CF-06000203
PACKAGING	PLASTIC TRAY

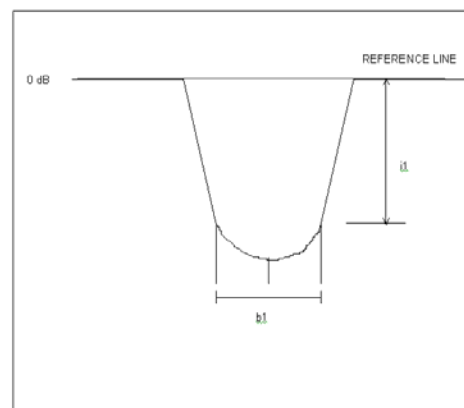
## 3. SPECIFICATIONS:

NO	ITEMS	Ref.	SPECIFICATION
1	Center Frequency (Fo)	-	600 MHz
2	Pass Band Width(PB)	-	Fo+/-10 MHz
3	Insertion Loss at Fo	-	2.0 dB Max
4	Ripple IN PB	-	1.0 dB Max
5	Return Loss IN PB	-	12dB Min
6	Attenuation [absolute Value]	At 450 MHz	50dB Min
		At 900 MHz	50dB Min
		At 1200 MHz	48dB Min
7	Group Delay Variation IN PB		20nsec Max
8	Impedance	-	50Ω
9	Maximum Input Power	-	1 W (+30dBm)
10	Operating Temperature Range	-	-35 - +75°C

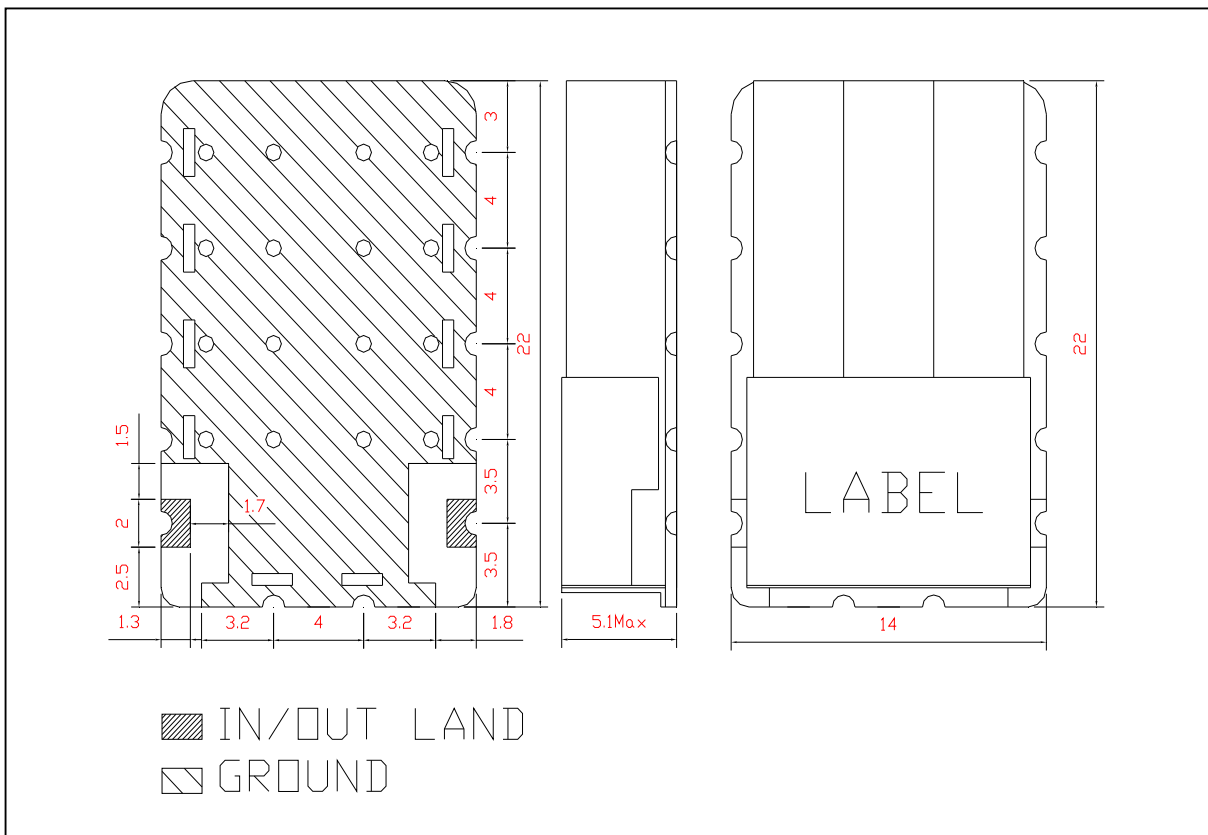
**S21 LOG MAG NETWORK ANALYZER**



**S11 SWR NETWORK ANALYZER**



**4. DIMENSIONS:**



MATERIAL SPECIFICATION	
1.	PCB
1)	MATERIAL: FR4
2)	TERMINALS: Au PLATED
2.	METAL CASE
1)	MATERIAL: Sn OR Ni PLATED
3.	RESONATOR
1)	COATING MATERIAL: Ag
2)	DIMENSION: 3.0MM x 3.0MM

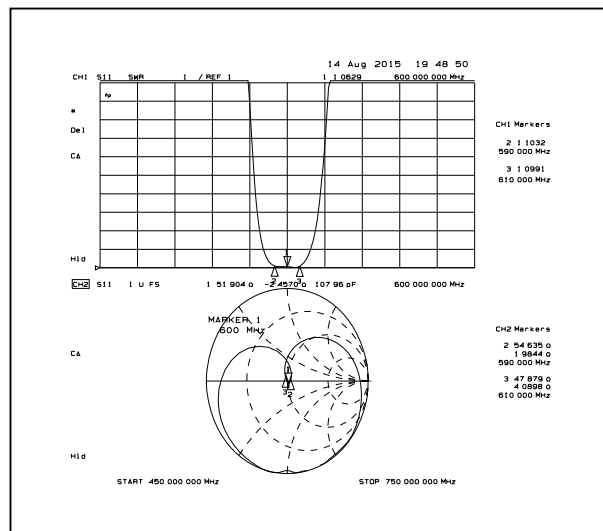
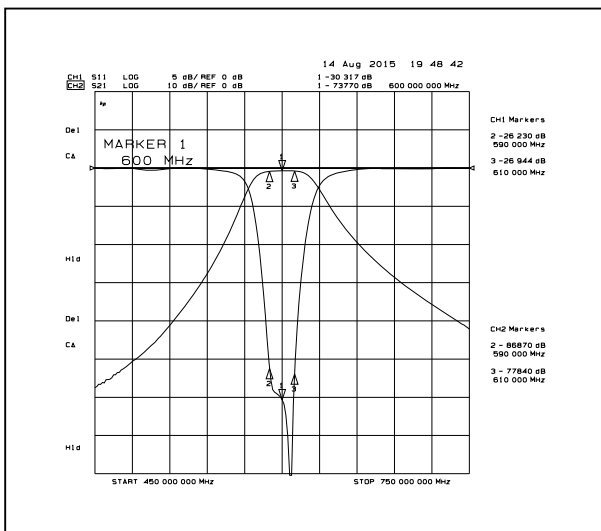
MARKING
CF-06000203
Date Code
YY: YEAR
WW: WEEK
UNIT:MM
TOLERANCE: +/-0.5MM
IN/OUT LAND: +/-0.3MM

**CAUTIONS:**

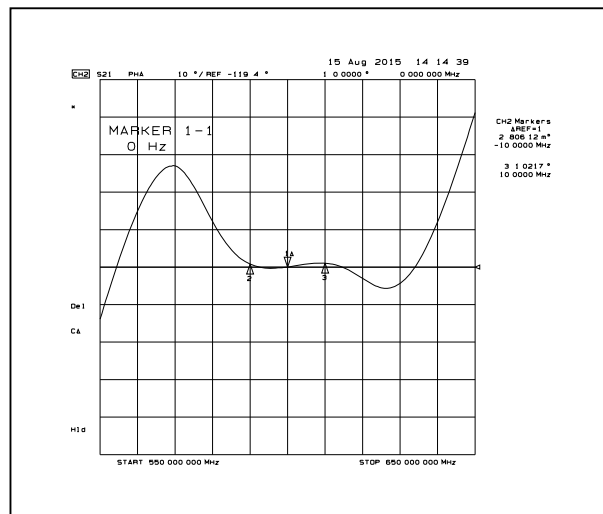
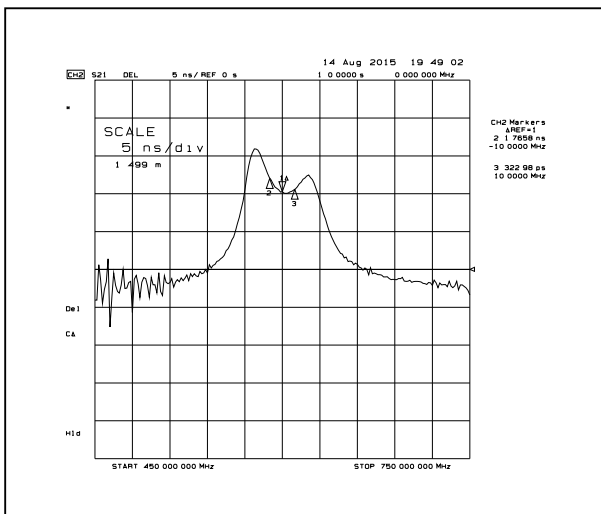
1. When handling products, be careful not to damage the outer-electrode.
2. When handling products be careful not to touch the outer-electrode with bare hands or solderability is reduced.
3. Do not apply excessive pressure or shock to product in handling or in transportation or damage to the ceramic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

### 5. SIMULATION:

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



#### S21 (Group Delay, Phase linearity)



#### S21 (ATTENUATION)

