

# SPECIFICATION

## COMMERCIALY AVAILABLE

**CERAMIC BAND PASS**  
**PART NUMBER: CF-09000258**

ISSUED / REVISION	ENGINEER APPROVED	DOCUMENT CHECKED	DRAFTSMAN	DOCUMENT CHECKED
9/14/15 <sup>(kn)</sup>				

***FILTRONETICS Inc***

## 1. APPLICATION

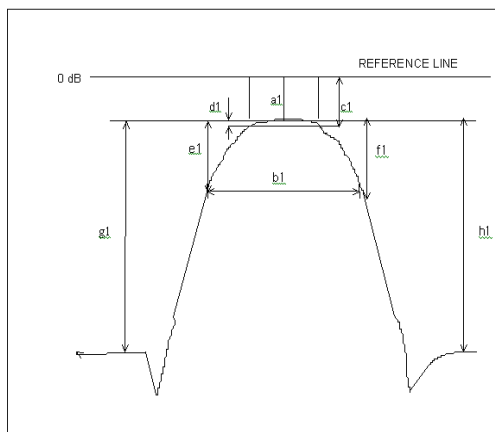
THIS SPECIFICATION APPLIES TO A BAND PASS FILTER, USING DIELECTRIC RESONATORS.

## 2. PART NUMBER: CF-09000258

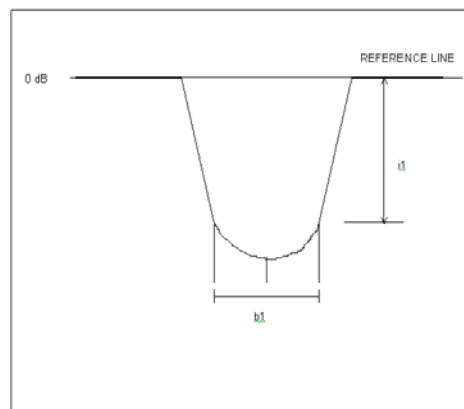
## 3. SPECIFICATIONS:

NO	ITEMS	Ref.	SPECIFICATION
1	Center Frequency (Fo)	-	900 MHz
2	Pass Band Width (PB)	-	Fo+/-12.5Mhz
3	Insertion Loss At Fo	-	4.3 dB Max
4	2 dB BAND WIDTH		25MHz Min
5	20 dB BAND WIDTH		50MHz Max
6	45 dB BAND WIDTH		65MHz Max
7	60 dB BAND WIDTH		77MHz Max
8	Return Loss	-	10 dB Min
9	Impedance	-	50Ω
10	Maximum Input Power	-	1 W (+30dBm)
11	Operating Temperature Range	-	-25 ~ +55°

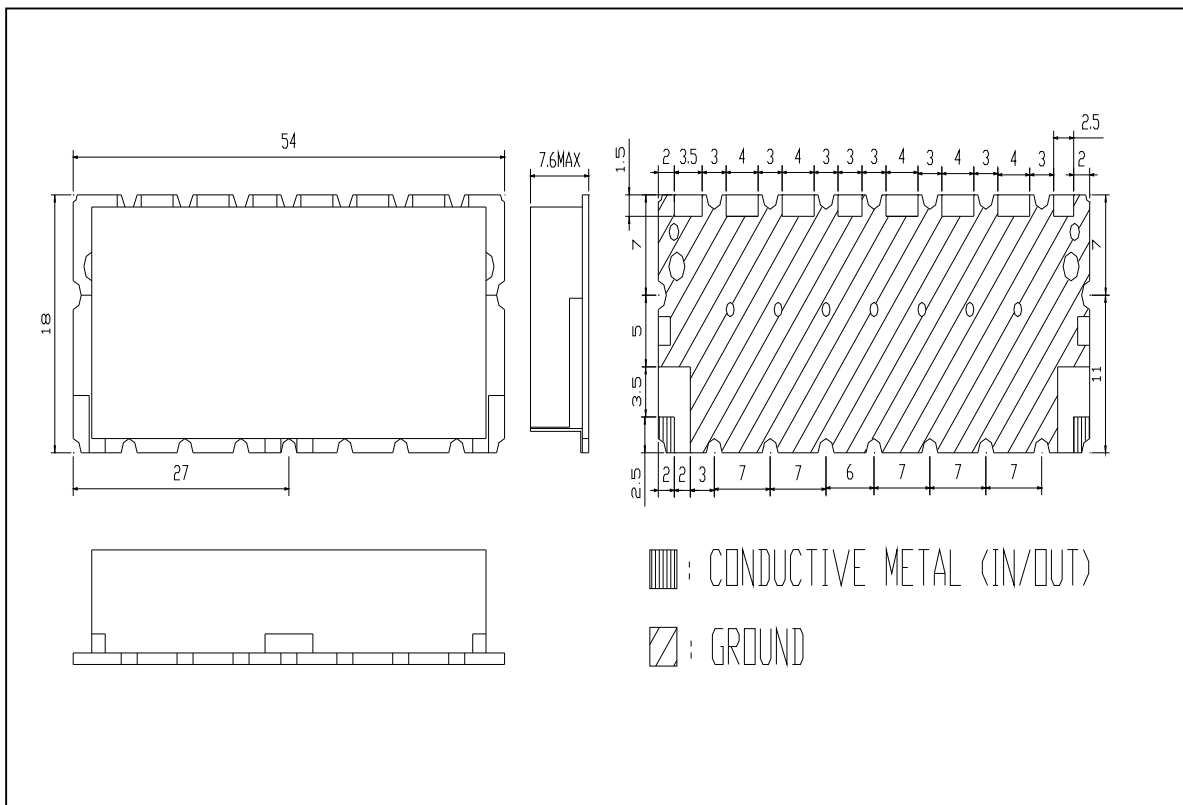
**S21 LOG MAG NETWORK ANALYZER**



**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: 6.0MM x 6.0MM

**MARKING**

Part No  
 Date Code  
 YY: YEAR  
 WW: WEEK

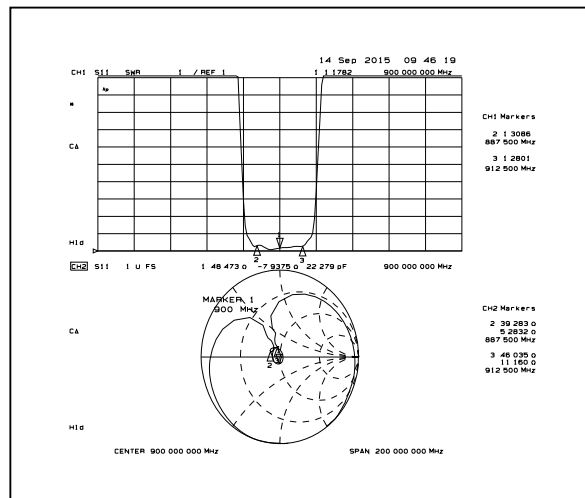
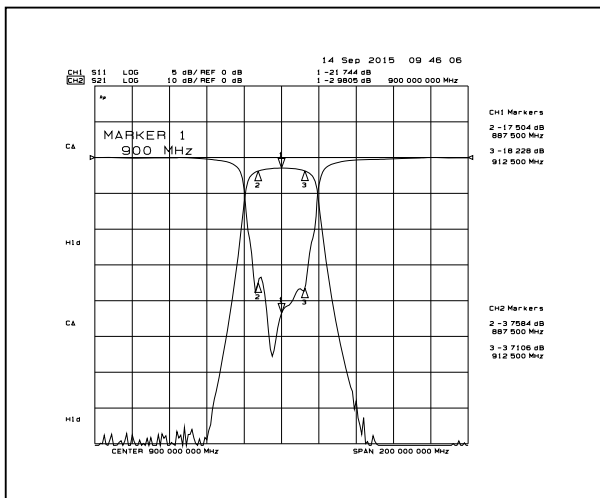
UNIT:MM  
 TOLERANCE: +/-0.5MM  
 IN/OUT LAND: +/-0.3MM

● **CAUTIONS:**

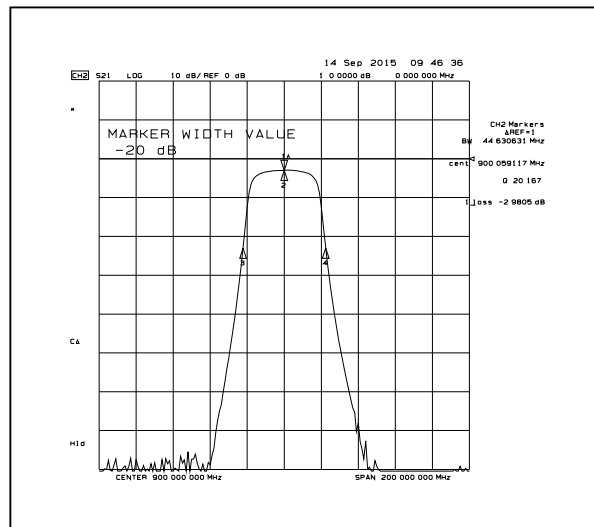
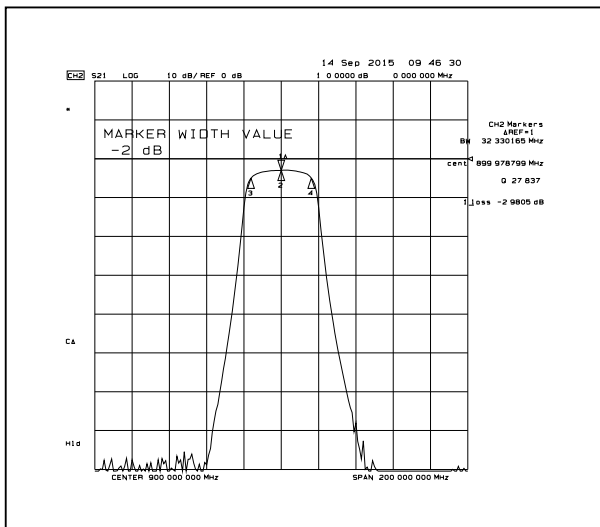
1. When handling products, be careful not to damage the outer-electrode.
2. When handling products be careful not to touch the outer-electrode with bare hands or solderability is reduced.
3. Do not apply excessive pressure or shock to product in handling or in transportation or damage to the ceramic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

5. SIMULATION:

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



S21 (2dB BAND WIDTH, 20dB BAND WIDTH)



S21 (45dB BAND WIDTH, 60dB BAND WIDTH)

