# SPECIFICATION

**COMMERCIALLY AVAILABLE**

**ITEM:DIELECTRIC CERAMIC FILTER**
**PART NUMBER: CFM-375020010**

**Prepared By:kn**
**Revised By:**

| ISSUED | CHECKED | CHECKED | CHECKED | APPROVED |
|---|---|---|---|---|
| | | | | |

***FILTRO**NETICS Inc*

*6010 Parretta Dr. Kansas City, MO 64120*
*(p) 816-231-7375 (f) 816-241-0368*
***FILTRO**NETICS, Inc*
*www.filtro.net*

## 1. APPLICATION

THIS SPECIFICATION APPLIES TO A BAND PASS FILTER USING DIELECTRIC RESONATORS

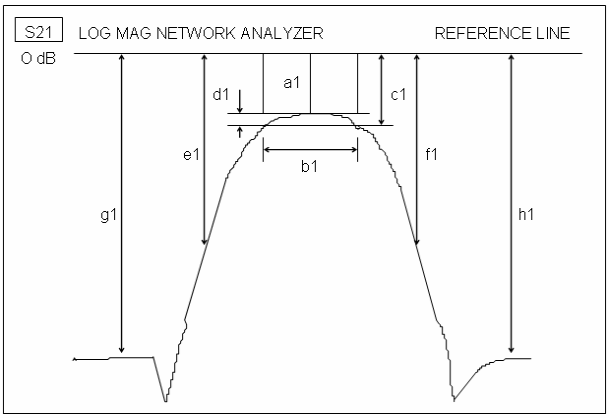
## 2. PART NUMBER:

| PART NO | CFM-375020010 |
|---|---|

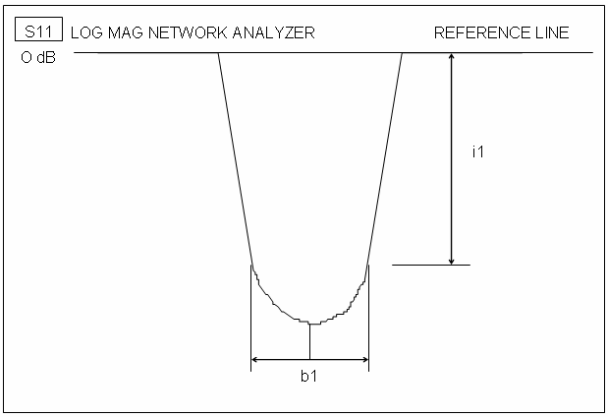
## 3. SPECIFICATIONS:

| NO | Parameter | | | Typ. | Spec.(@25□) |
|---|---|---|---|---|---|
| 1 | Center Frequency (Fo) | | a1 | 3750 MHz | |
| 2 | Pass Bandwidth (BW) | | - | 200 MHz (3650 ~ 3850MHz) | |
| 3 | Insertion Loss in BW | | - | 2.82 dB | 3.2 dB Max. |
| 4 | Ripple in BW | | - | 1.0 dB | 1.2 dB Max. |
| 5 | Return Loss in BW | | - | 15.0 dB | 14.0 dB Min. |
| 6 | Attenuation | At 3610 MHz | - | | 14.0 dBc Min. |
| | [Absolute Value] | At 3890 MHz | - | | 15.0 dBc Min. |
| 7 | Impedance | | - | 50 Ohm | |
| 8 | Input Power | | - | 3 W Max. | |
| 9 | Operating Temperature | | - | -40 to +85°C | |

**S21 LOG MAG NETWORK ANALYZER**

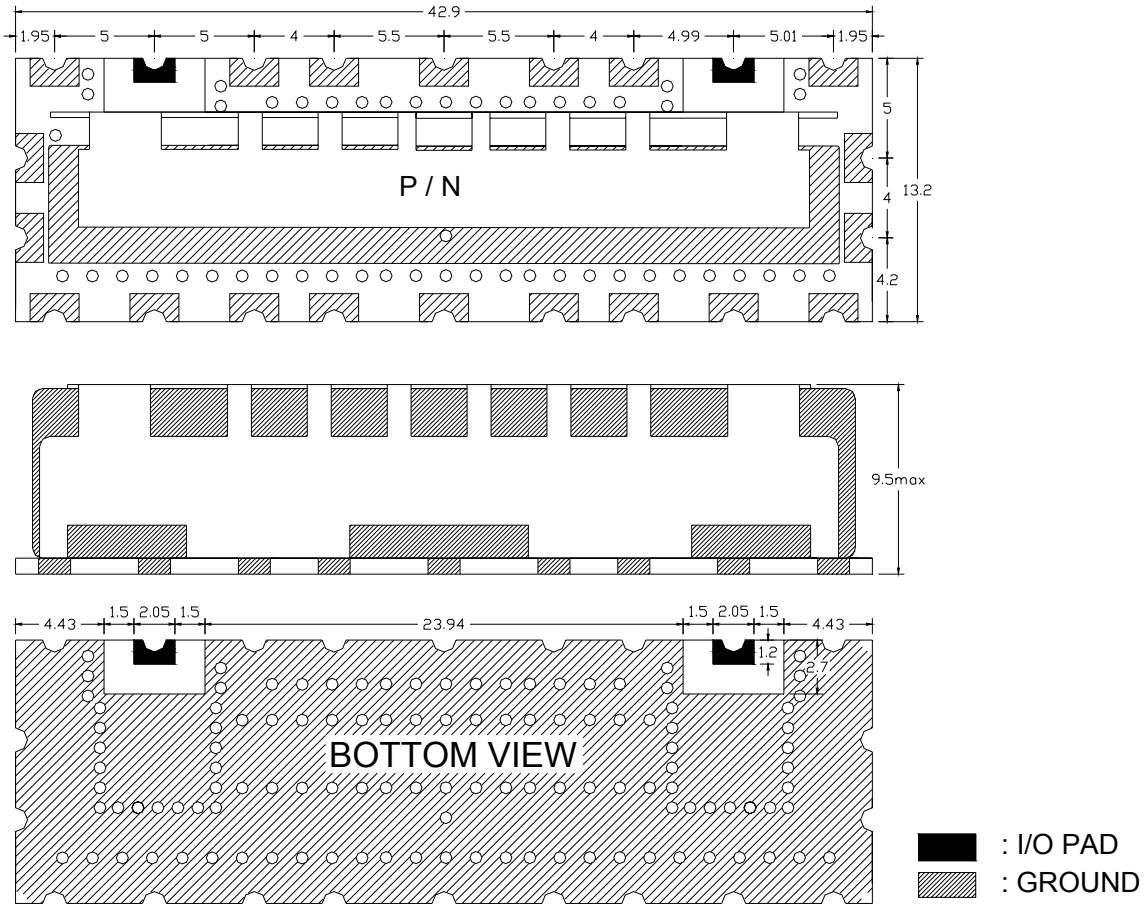



**S11 LOG MAG NETWORK ANALYZER**



## 4.DIMENSIONS:

UNIT: MM
TOLERANCE: ±0.3MM

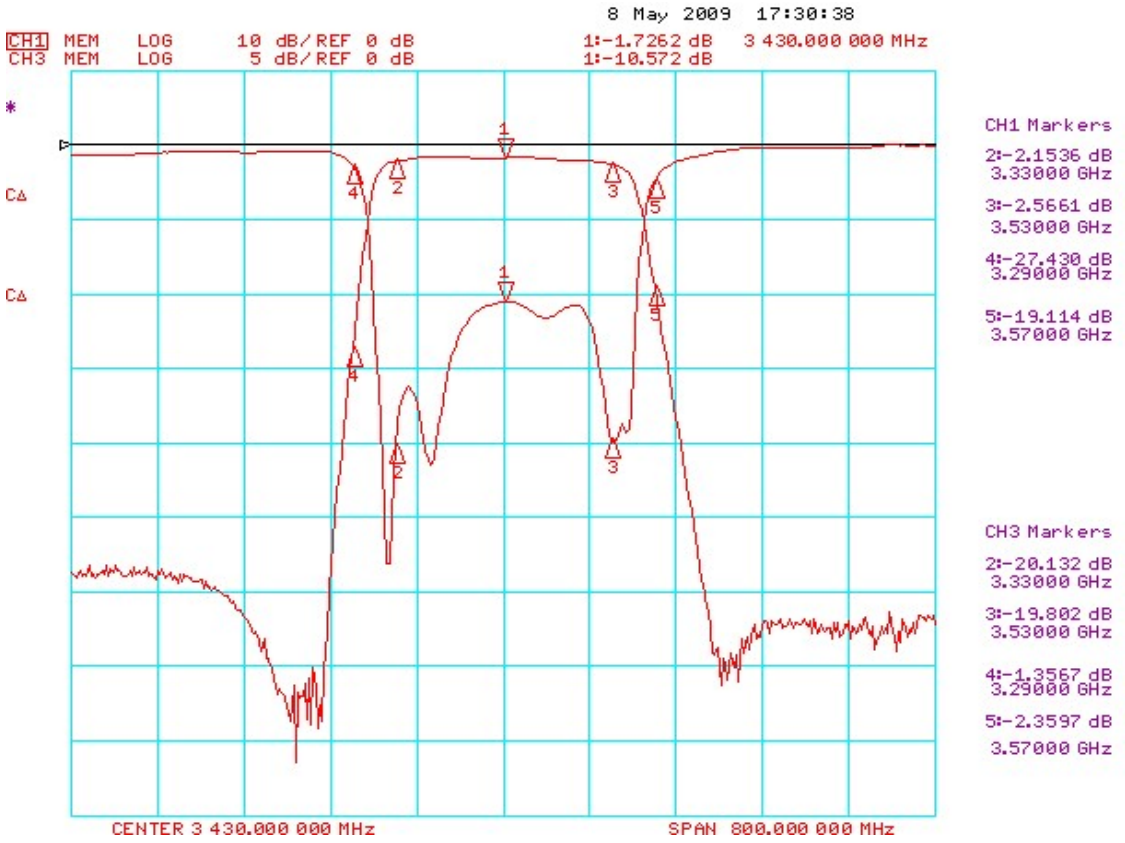



□ MATERIAL SPECIFICATION

1. METAL CASE
   : Sn
2. RESONATOR
   1) COATING MATERIAL: Ag
3. RoHS Compliant

※ MARKING (Laser)

## 5. GRAPHS: S21 & S11 (Insertion Loss, Return Loss,Attenuation




## 6. DEFINITIONS

| | DESCRIPTION | SPECIFICATION |
|---|---|---|
| Center Frequency | The midpoint of through band pass filter pass band, normally expressed as the arithmetic mean of the -3dB point. Also called fo. | 3. SPECIFICATION |
| Pass Band Width | The width of the pass band of a filter referenced to the minimum insertion loss point in the pass band. The pass band of a filter is stated as -1.0dB bandwidth. | |
| Insertion Loss | The loss of the filter, in dB, measured at center frequency relative to a through line (0 dB). | |
| Attenuation | Reduction of RF power through a filter measured in dB, at desired band and referenced to 0 dB. (Filter to be removed from circuit) | |
| Pass Band Ripple | Variations in loss in the pass band of the filter, superimposed upon the fundamental shape of the pass band. | |
| V.S.W.R in Pass Band | The ratio of the maximum value of a standing wave to its minimum value, related to the return loss in pass band. | |