SPECIFICATION

COMMERCIALLY AVAILABLE

ITEM: DIELECTRIC CERAMIC DUPLEXER
PART NUMBER:CFDM-221000510

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 BAND PASS FILTER USING DIELECTRIC RESONATORS.

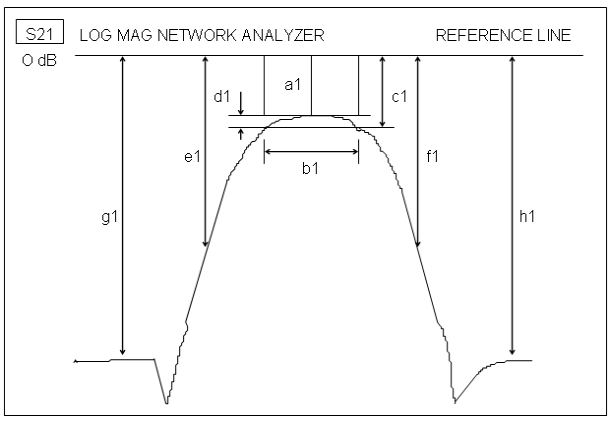
2. PART NUMBER

PART NO	CFDM-221000510

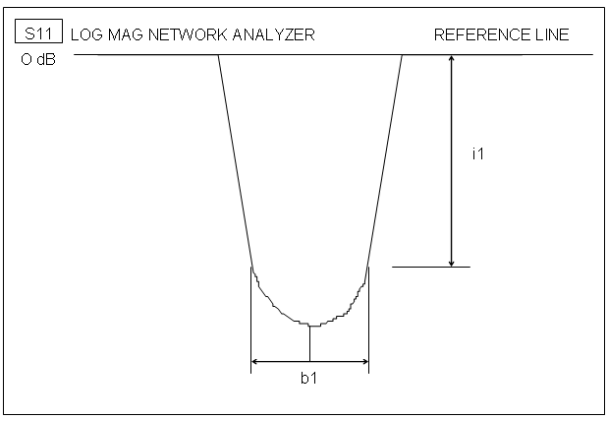
3. SPECIFICATIONS

NO	Parameter			LOW		HIGH	
				Typ.	Spec.(@25℃)	Typ.	Spec.(@25℃)
1	Center Frequency (Fo)		a1	2210 MHz		2290 MHz	
2	Pass Bandwidth (BW)		-	2207.5 ~ 2212.5MHz		2287.5 ~ 2292.5MHz	
3	Insertion Loss in BW		-	1.7 dB.	2.0 dB Max.	1.7 dB.	2.0 dB Max.
4	Ripple in BW		-	0.2 dB.	0.5 dB Max.	0.2 dB.	0.5 dB Max.
5	Return Loss in BW		-	17.0 dB.	15.0 dB Min.	17.0 dB.	15.0 dB Min.
6	Attenuation [Absolute Value]	@2207.5~2212.5MHz	-	-		. 55.0 dB	50.0 dB Min
		@2287.5~2292.5MHz	-	50.0dB	45.0 dB Min	-	-
7	Isolation	@2207.5~2292.5MHz		25.0 dB			
8	Impedance		-	50 Ohm			
9	Input Power		-	3 W Max.			
10	Operating Temperature		-	-40 to +85°C			

S21 LOG MAG NETWORK ANALYZER



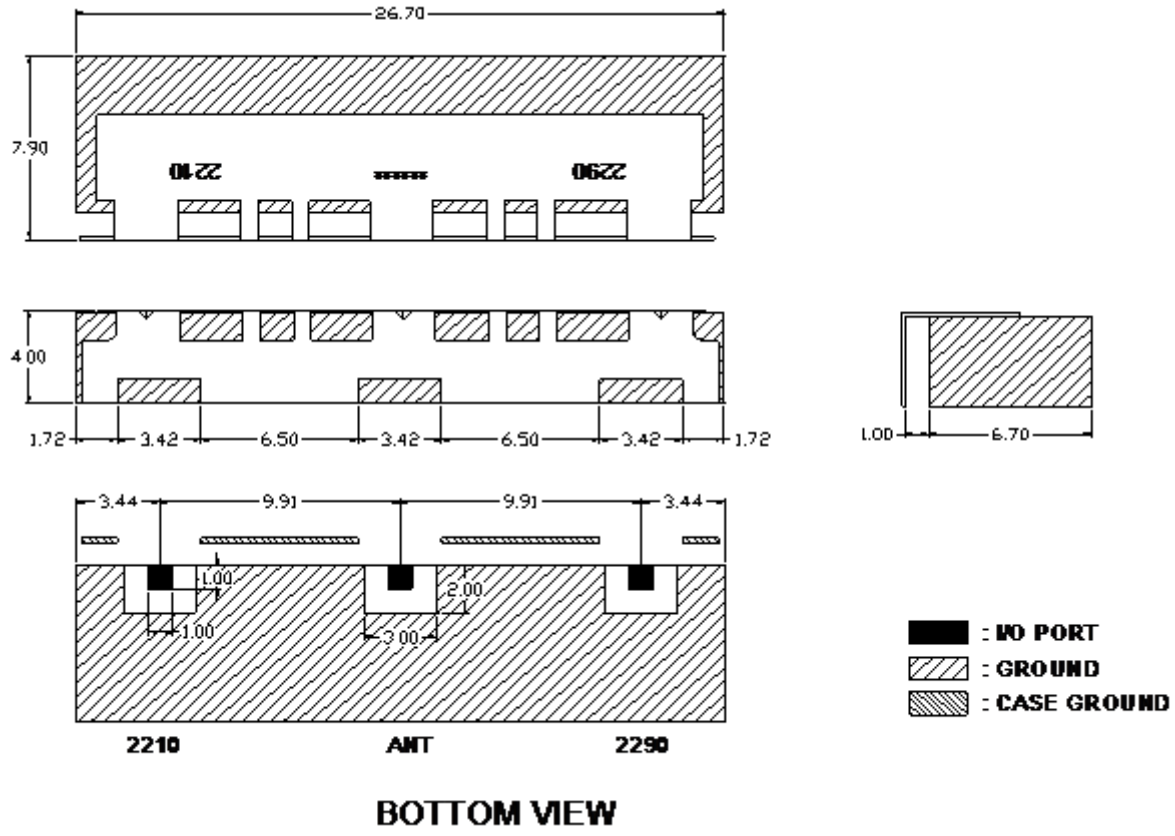
S11 LOG MAG NETWORK ANALYZER



4. DIMENSIONS

UNIT: MM

TOLERANCE: ±0.3MM



BOTTOM VIEW

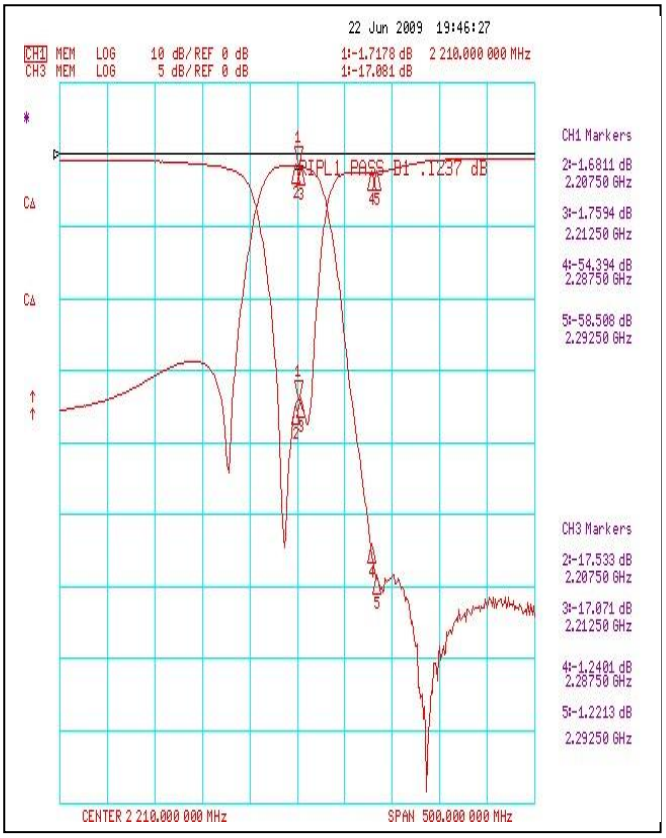
※MATERIAL SPECIFICATION

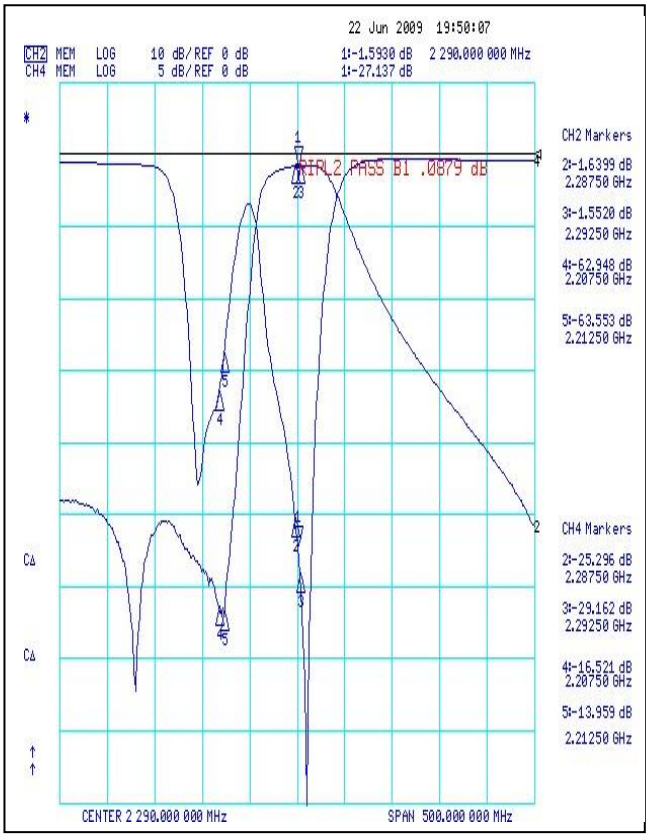
1. METAL CASE
   : Sn
2. RESONATOR
   1) COATING MATERIAL: Ag
3. RoHS Compliant

※ MARKING (LASER)
CFDM-221000510

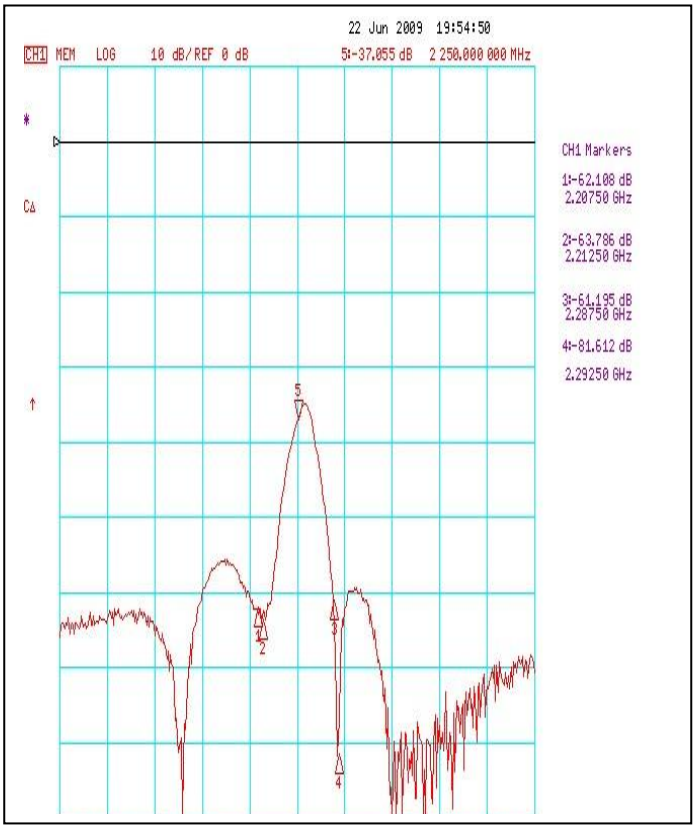
5.GRAPHS

S21 & S11 (LOW, HIGN INSERTION LOSS, RETIRN LOSS, ATTENUATION)





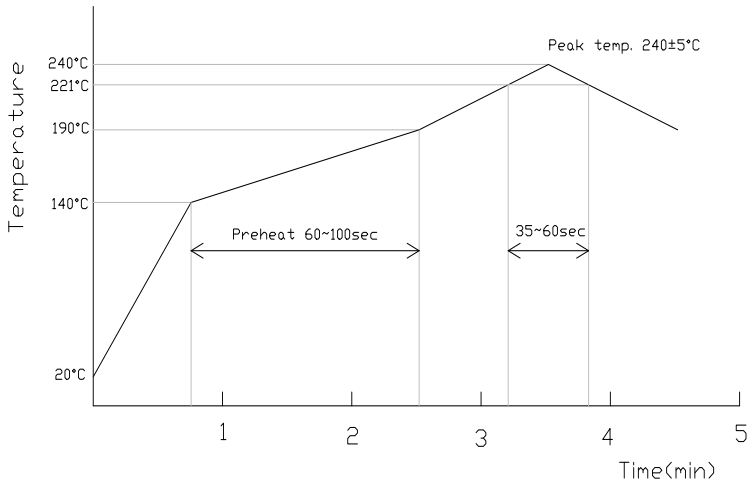
S21 (ISOLATION)



6. DEFINITIONS

TERMS	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.	
Date Code	Each date code shall be from a single lot	
Lot	One Batch of parts processed in a single manufacturing run. A single lot shall have no more than one firing, plating, soldering, or other batch processing.	
Cleanliness	Parts shall be clean. They shall be free from smudges, loose solder, solder spatter, metal chips or mold release agents. No burrs. Particles or any foreign material over 0.2 mm which might detract from the intended operation, function or appearance of the part.	

7. REFLOW SOLDERING STANDARD CONDITIONS



- Measuring point of temperature in-out terminals of the device.
- Reflow Soldering
- Both convection and infrared rays
- Hot air
- Solder Cream: Sn96.5/Ag3.5