SPECIFICATION

COMMERCIALLY AVAILABLE

ITEM: SAW BAND PASS FILTER
PART NUMBER: SF05000008
RoHS

ISSUED / REVISION	ENGINEER APPROVED	DOCUMENT CHECKED	DRAFTSMAN
05/12/2021(ASM)	05/12/2021(TG)		

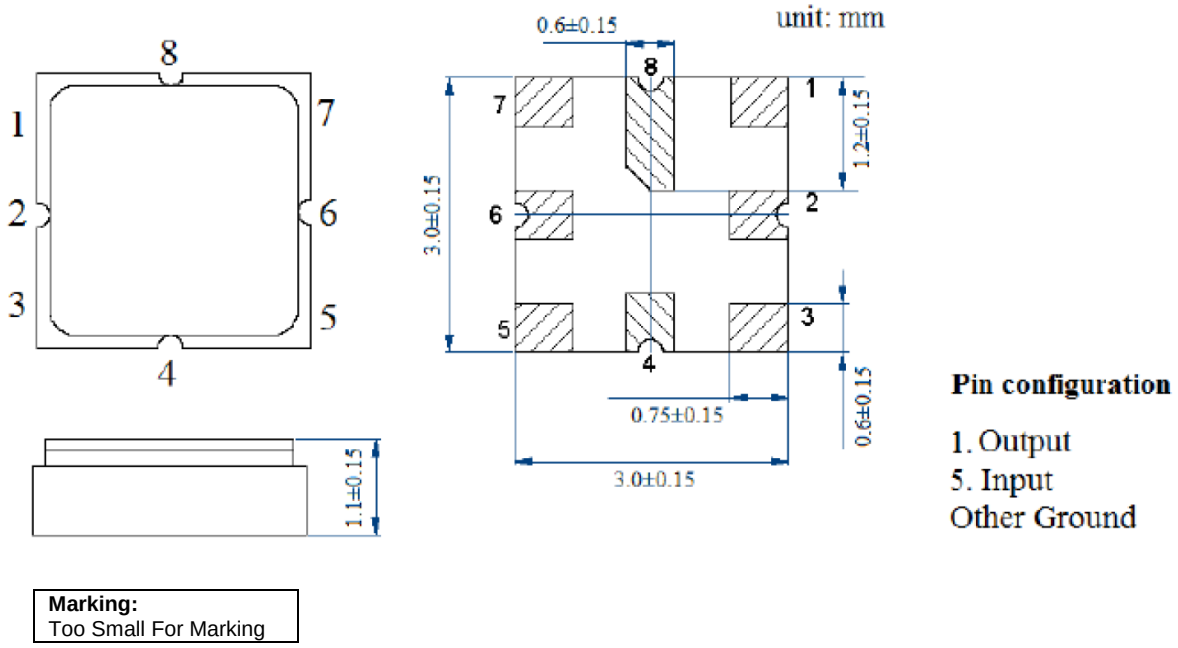
***FILTRO**NETICS Inc*

1. Electrical Specifications:

Parameter	Min.	Typ.	Max.	Units
Center Frequency	-	500	-	MHz
Insertion Loss @ 500 MHz	-	2.2	3.8	dB
3dB Bandwidth	0.80	0.87	-	MHz
Rejection Reference @ 500 MHz				dBc
10.00-498.40 MHz	22	26	-	
498.40-499.00 MHz	15	30	-	
501.00-501.80 MHz	15	26	-	
501.80-1000.00 MHz	*23(Target)	25	-	
Maximum Input Power	+15dBm			
DC Voltage	12V			
Operating Temperature	-40°C to +125°C			
Storage Temperature	-40°C to +85°C			
Input/Output Impedance	50 ohms			
Temperature Coefficient	-	0.032	-	ppm/°C
Turnover Temperature	-	15	-	°C
Aging	-	<±10	-	ppm/year
Matching	To be determined after production			

* To be confirmed after production

2. Dimension:

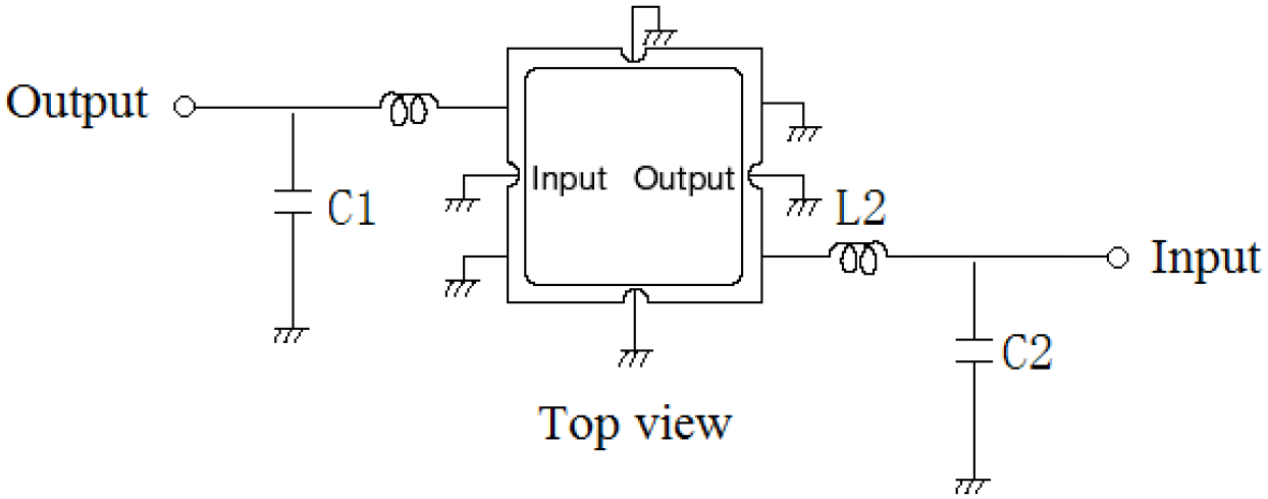


Pin configuration

1. Output
5. Input
Other Ground

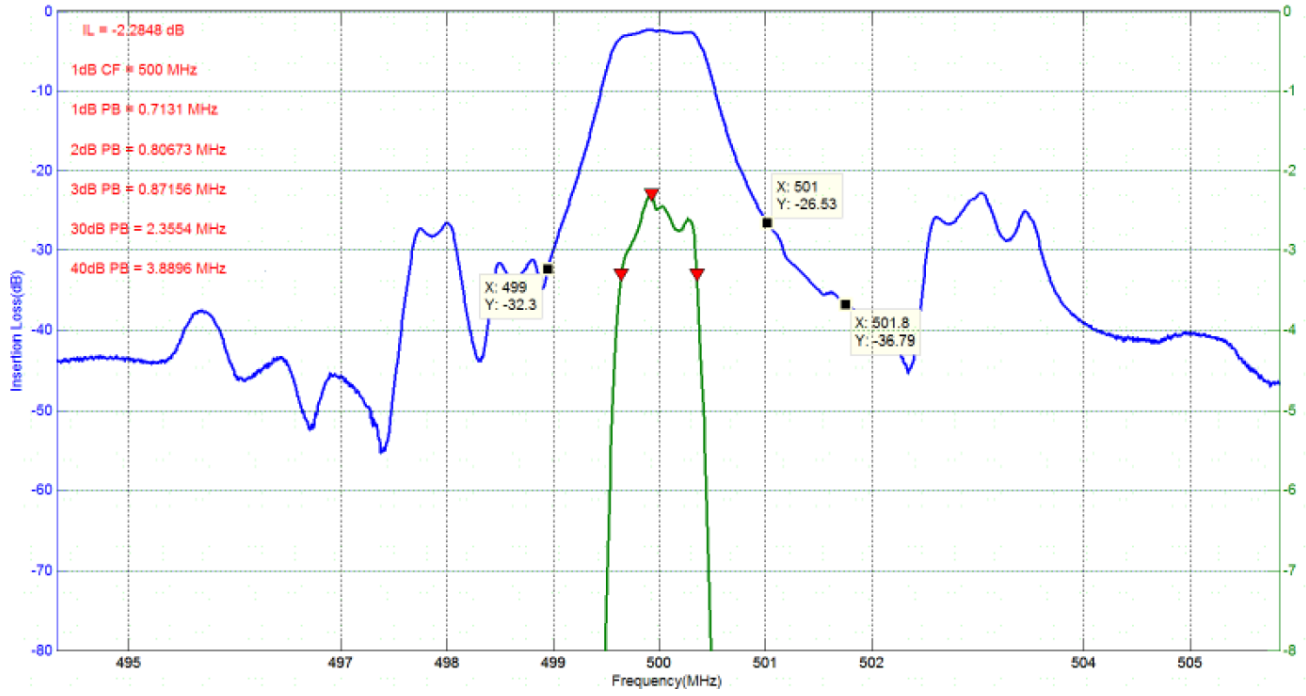
Marking:
Too Small For Marking

3. Test Circuit: (Matching to be determined after production)



Note: Matching

4. Theoretical Response:



5. Environmental Characteristics:

5-1 High temperature exposure

Subject the device to +85℃ for 16 hours. Then release the filter into the room conditions for 24 hours prior to the measurement. The device shall meet the specifications in 1.0.

5-2 Low temperature exposure

Subject the device to -40℃ for 16 hours. Then release the device into the room conditions for 24 hours prior to the measurement. The device shall meet the specifications in 1.0.

5-3 Temperature cycling

Subject the device to a low temperature of -40℃ for 30 minutes. Following by a high temperature of +85℃ for 30 Minutes. Then release the device into the room conditions for 24 hours prior to the measurement. The device shall meet the specifications in 1.0.

5-4 Resistance to solder heat

Dip the device terminals no closer than 1.5mm into the solder bath at 260℃ ±10℃ for 10±1 sec. Then release the device into the room conditions for 4 hours. The device shall meet the specifications in 1.0.

5-5 Solderability

Subject the device terminals into the solder bath at 245℃ ±5℃ for 5s, More than 95% area of the terminals must be covered with new solder. The device shall meet the specifications in 1.0.

5-6 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1m 3 times. the device shall fulfill the specifications in 2.2.

5-7 Vibration

Subject the device to the vibration for 1 hour each in x,y and z axes with the amplitude of 1.5 mm at 10 to 55 Hz. The device shall meet the specifications in 1.0.

6. Cautions:

6.1 Static voltage Static voltage between signal load & ground may cause deterioration &destruction of the component. Please avoid static voltage.

6.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component.
Please avoid ultrasonic cleaning

6.3 Soldering

Only leads of component may be soldered. Please avoid soldering another part of component.