SPECIFICATION

COMMERCIALLY AVAILABLE

SAW BAND PASS
PART NUMBER: SF0140023
RoHS

ISSUED / REVISION	ENGINEER APPROVED	DOCUMENT CHECKED	DRAFTSMAN
12/9/13 (kn)	12/16/2013 TFG		12/16/2013 GL

***FILTRO**NETICS Inc*

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***FILTRO**NETICS, Inc*
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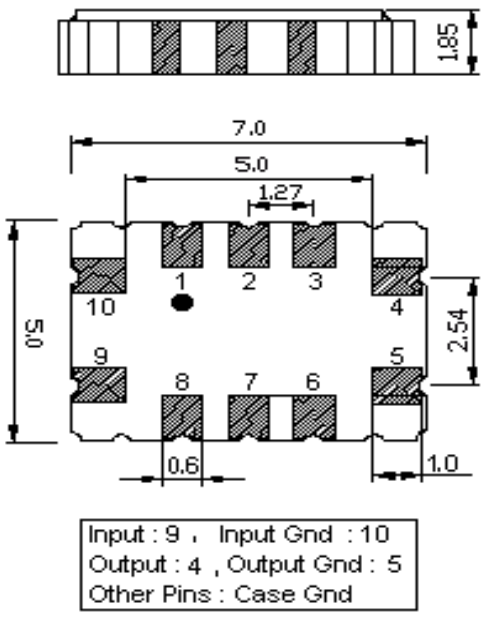
1. Electrical Specifications:

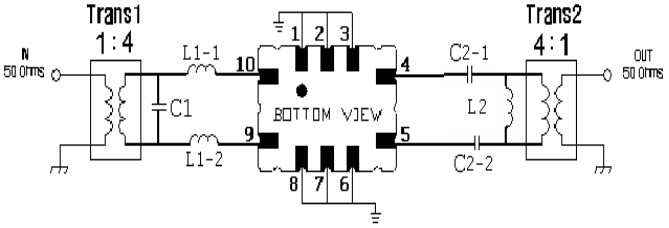
Parameter	Unit	Min.	Typ.	Max.
Center Frequency	MHz	-	140.00	-
Insertion Loss	dB	-	10.40	12.50
Passband Ripple(Fc±10.25MHz)	dB	-	0.60	1.00
Group Delay Variation(Fc±10.25MHz)	nsec	-	40	80
Relative Attenuation				
Fc +10.25MHz ~ -10.25MHz	dB	-	0.5	1.2
Fc-100 MHz ~ Fc - 17.3MHz	dB	40	50	-
Fc-17.3 MHz ~ Fc - 15.3MHz	dB	30	40	-
Fc ±14MHz	dB	15	19	-
Fc +16.3 MHz ~ Fc +18.3MHz	dB	30	35	-
Fc +18.3 MHz ~ Fc +80MHz	dB	38	45	-
Fc +80MHz ~ Fc +110 MHz	dB	50	55	-
Fc +110MHz~ Fc +210 MHz	dB	40	53	
Absolute Delay	µsec	-	0.59	-
Substrate Material	-	$YZ\text{-}LiNbO_3$		
Temperature Coefficient	ppm/°C	-86		

2. Dimension:



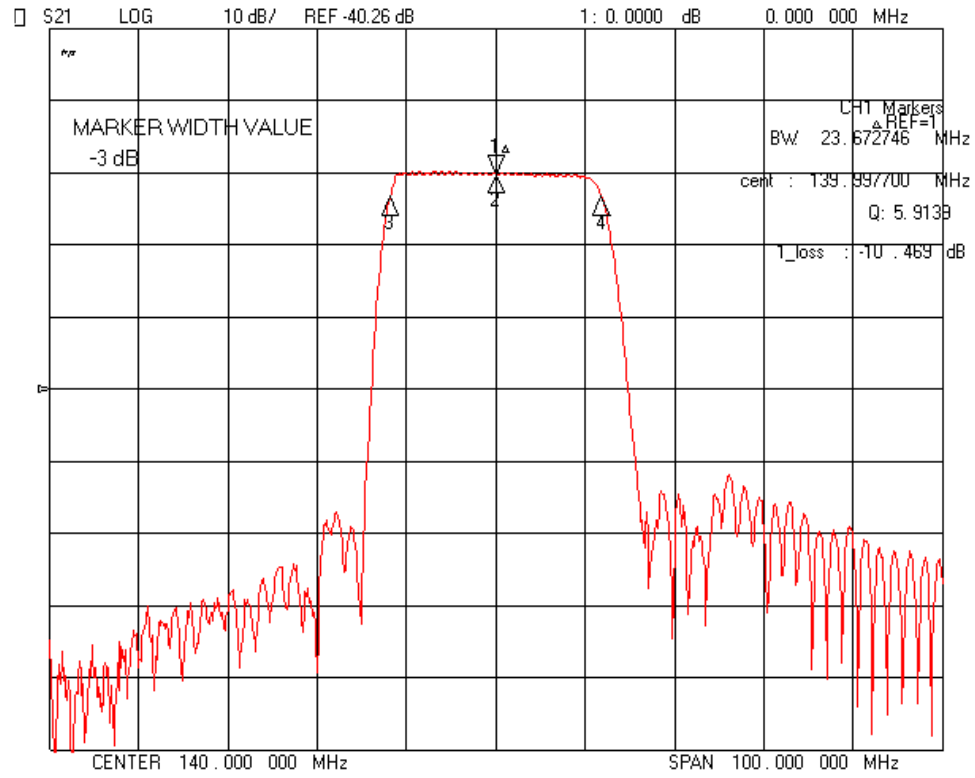
Input : 9 , Input Gnd : 10
Output : 4 , Output Gnd : 5
Other Pins : Case Gnd

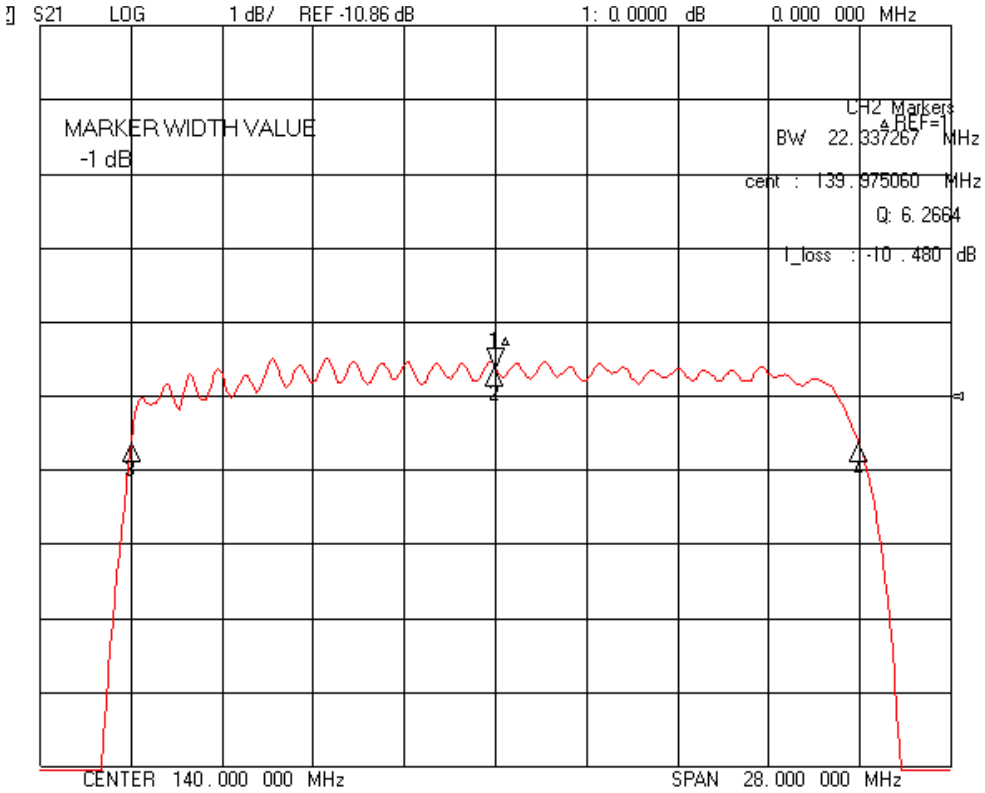
Marking:
SF0140023
Date Code

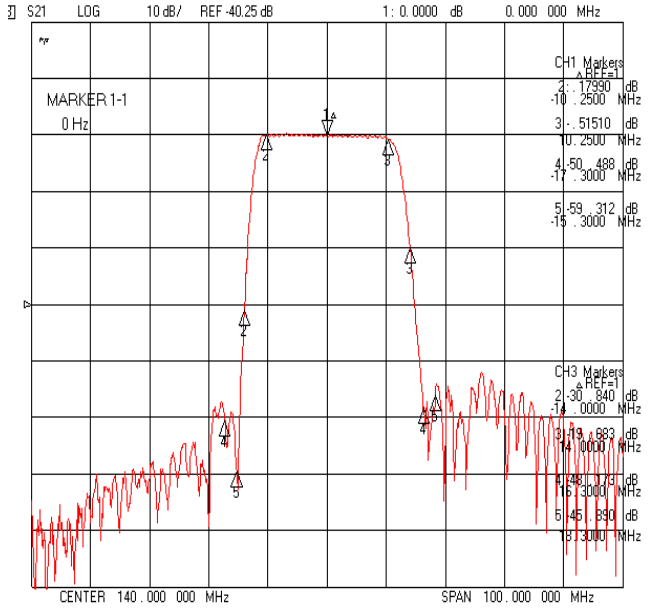


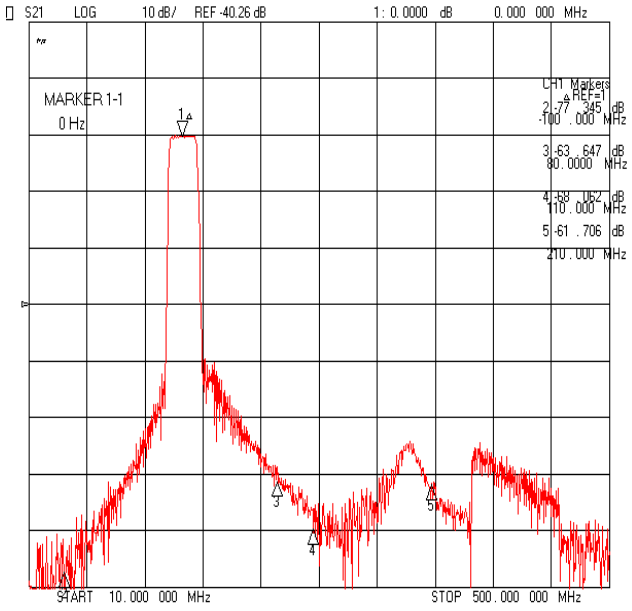
L1-1,L1-2=47nH, L2=68nH
C1=16pF, C2-1,C2-2=150pF
Source / Load Impedance = 50Ω
Ambient Temperature = 25°C

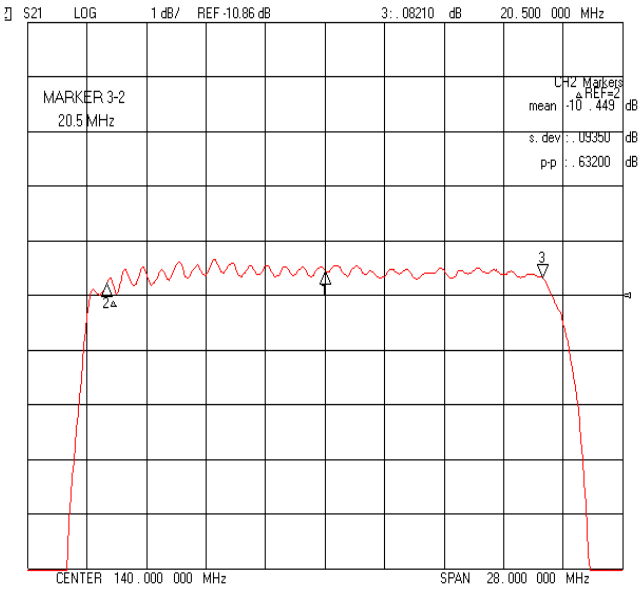
3. Typical Performance:

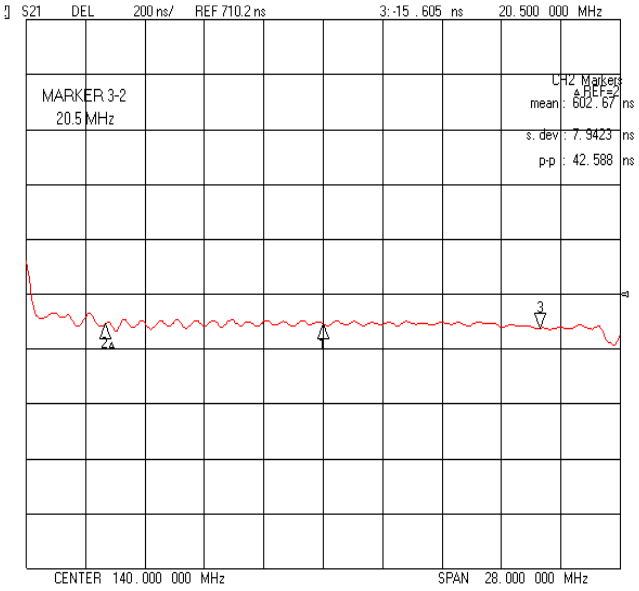


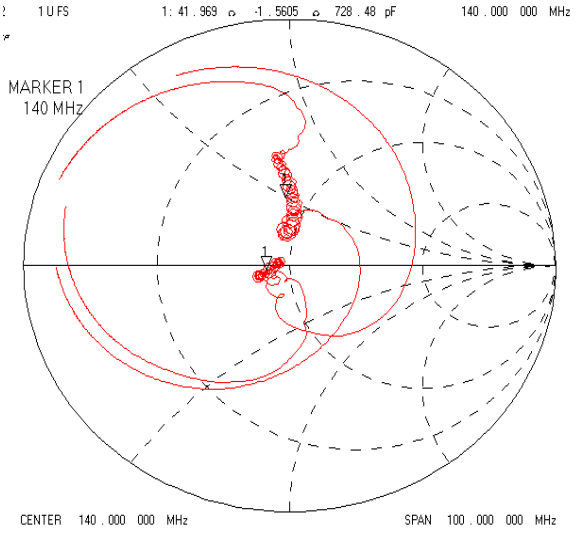


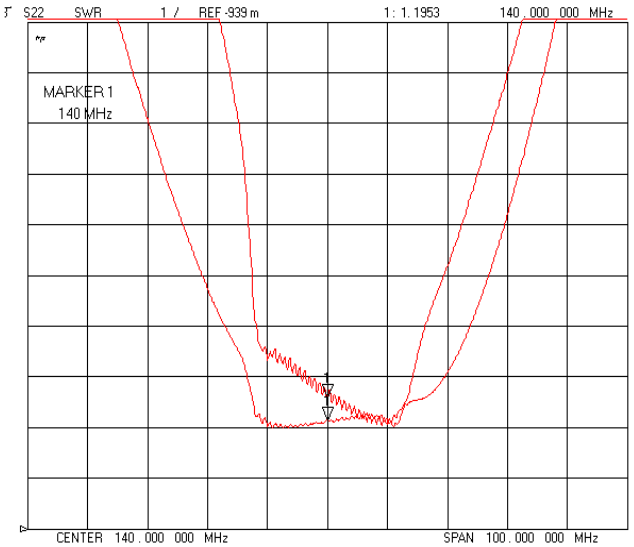

S21 LOG 10 dB/ REF -40.25 dB 1: 0.0000 dB 0.000 000 MHz
MARKER 1-1
0 Hz
CH1 Markers
CH3 Markers
CENTER 140.000 000 MHz
SPAN 100.000 000 MHz


S21 LOG 10 dB/ REF -40.26 dB 1: 0.0000 dB 0.000 000 MHz
MARKER 1-1
0 Hz
CH1 Markers
START 10.000 000 MHz
STOP 500.000 000 MHz


S21 LOG 1 dB/ REF -10.86 dB 3: .08210 dB 20.500 000 MHz
MARKER 3-2
20.5 MHz
CH2 Markers
mean -10.449 dB
s.dev .09350 dB
p-p .63200 dB
CENTER 140.000 000 MHz
SPAN 28.000 000 MHz


S21 DEL 200 ns/ REF 710.2 ns 3: -15.605 ns 20.500 000 MHz
MARKER 3-2
20.5 MHz
CH2 Markers
mean 602.67 ns
s.dev 7.9423 ns
p-p 42.588 ns
CENTER 140.000 000 MHz
SPAN 28.000 000 MHz


1 U FS 1: 41.969 Ω -1.5605 Ω 728.48 pF 140.000 000 MHz
MARKER 1
140 MHz
CENTER 140.000 000 MHz
SPAN 100.000 000 MHz


S22 SWR 1 / REF 939 m 1: 1.1953 140.000 000 MHz
MARKER 1
140 MHz
CENTER 140.000 000 MHz
SPAN 100.000 000 MHz