

SAW Filter 138.240MHz

Model: TB0713A

Part No: MP01898

REV. NO.:1

A. MAXIMUM RATING:

1. Operating temperature range: -10°C to 80°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

B. CHARACTERISTICS:

Item	Unit	Min.	Type.	Max.
Center frequency, F_c	MHz	-	138.24	-
Insertion Loss, IL	dB	-	23.8	25
Upper -1dB frequency	MHz	176.24	177.3	-
Lower -1dB frequency	MHz	-	98.92	100.24
Upper -35dB frequency	MHz	-	183.00	186
Lower -35dB frequency	MHz	90	96.2	-
Passband Ripple F_c±38MHz	dB	-	0.7	1.5
Attenuation (Reference level from minimum Insertion loss)				
190 MHz ~ 290 MHz	dB	30	35	
290 MHz ~ 390 MHz	dB	25	28	
390 MHz ~ 600 MHz	dB	35	39	
Temperature Coefficient	ppm/°C	-	-72	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

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C. FREQUENCY CHARACTERISTICS:

(1) Wide band Response:(span 600MHz)

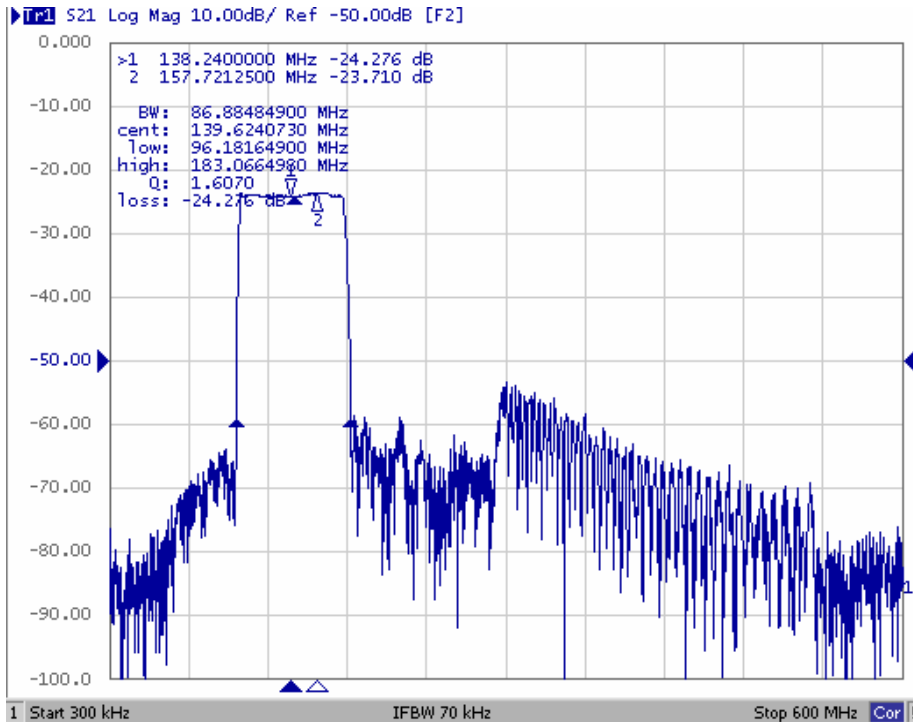


Fig1. Horizontal: 60MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Time Delay response:

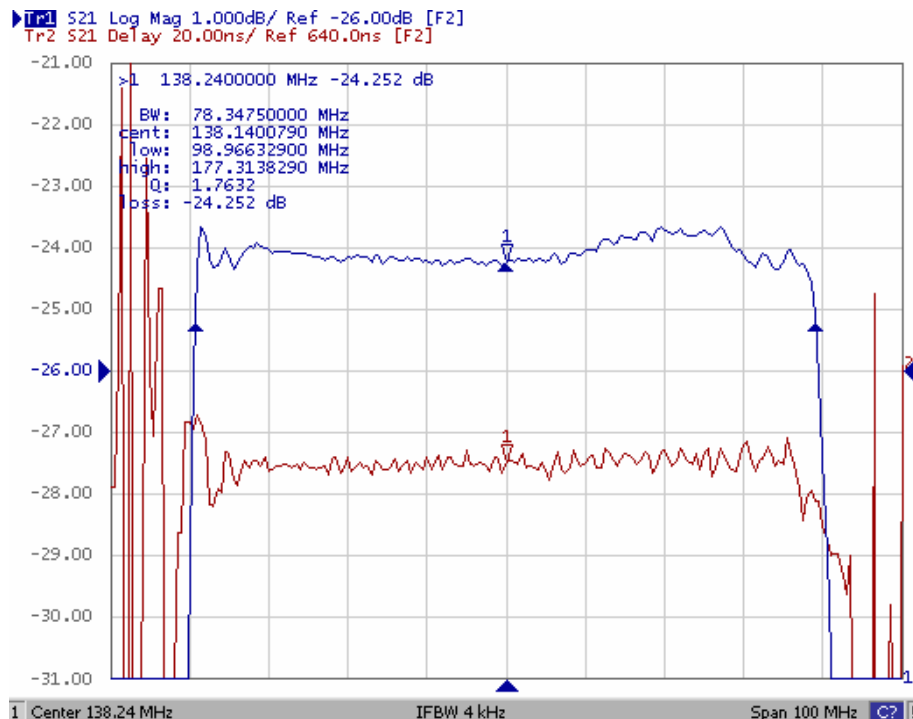
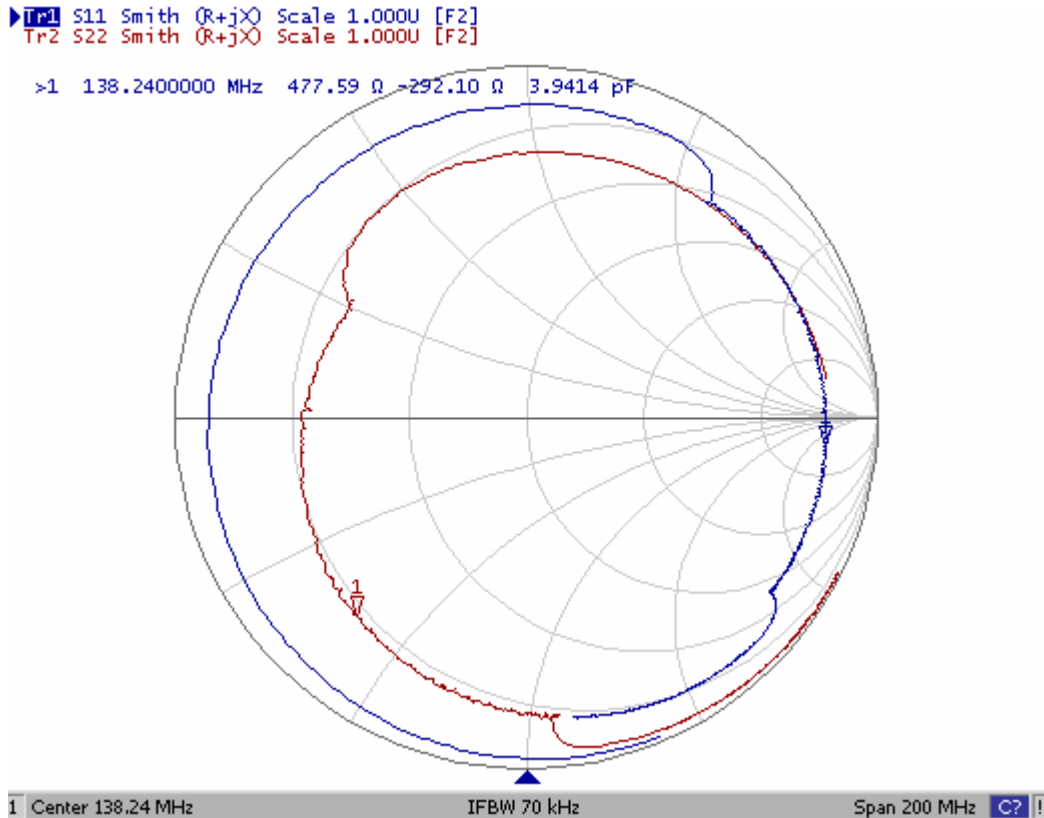


Fig2. Horizontal: 10MHz/Div Vertical: 1dB/Div. Vertical: 20ns/Div

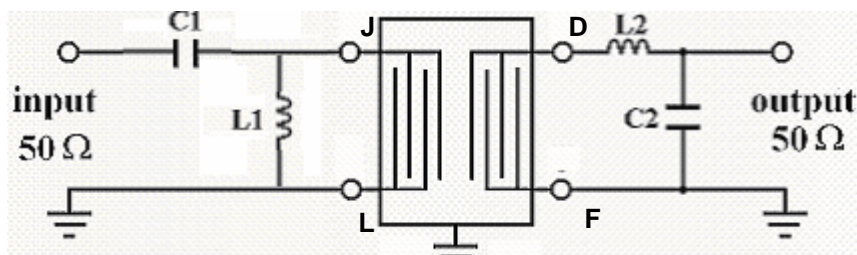
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(3) Smith Chart:



D. MATCHING CIRCUIT:

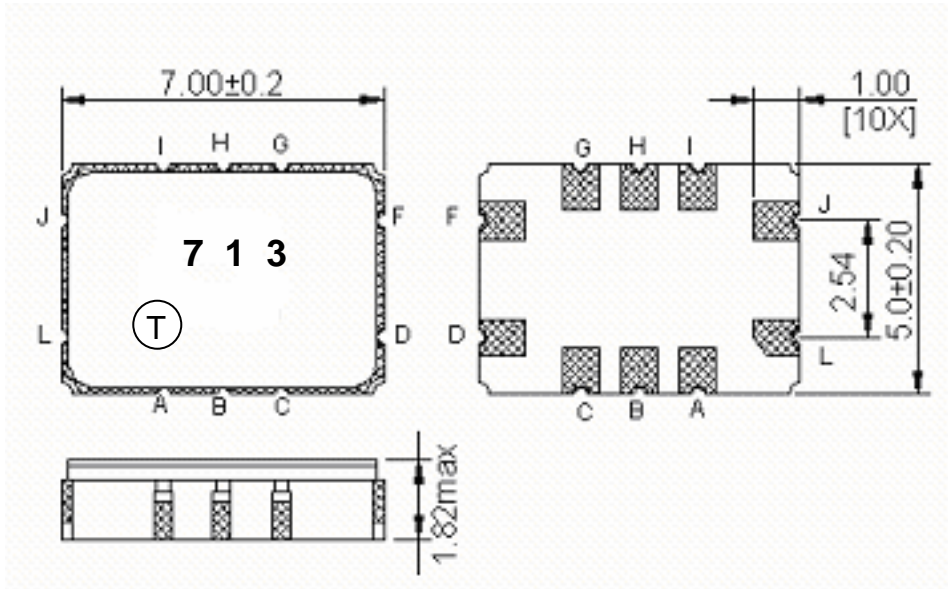


L1=100nH L2=82nH C1=39pF C2=6pF
Zin=50ohm Zout=50ohm

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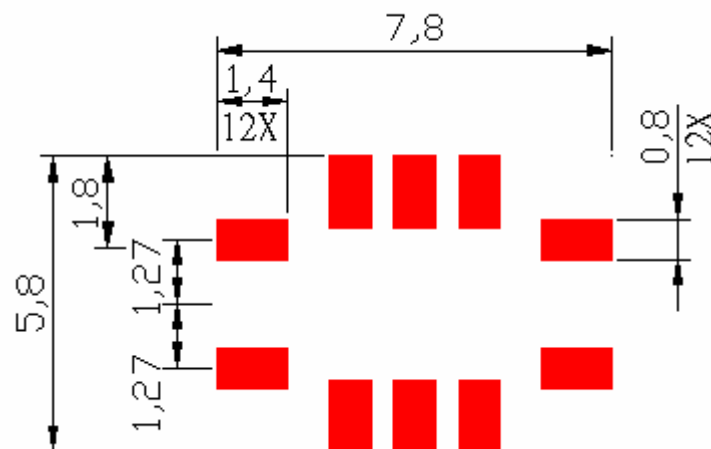
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E. OUTLINE DRAWING:



- Pin J –RF input
- Pin L –RF input ground
- Pin D –RF output
- Pin F –RF output ground
- Pin A,B,C,G,H,I - Ground

F. PCB FOOTPRINT:



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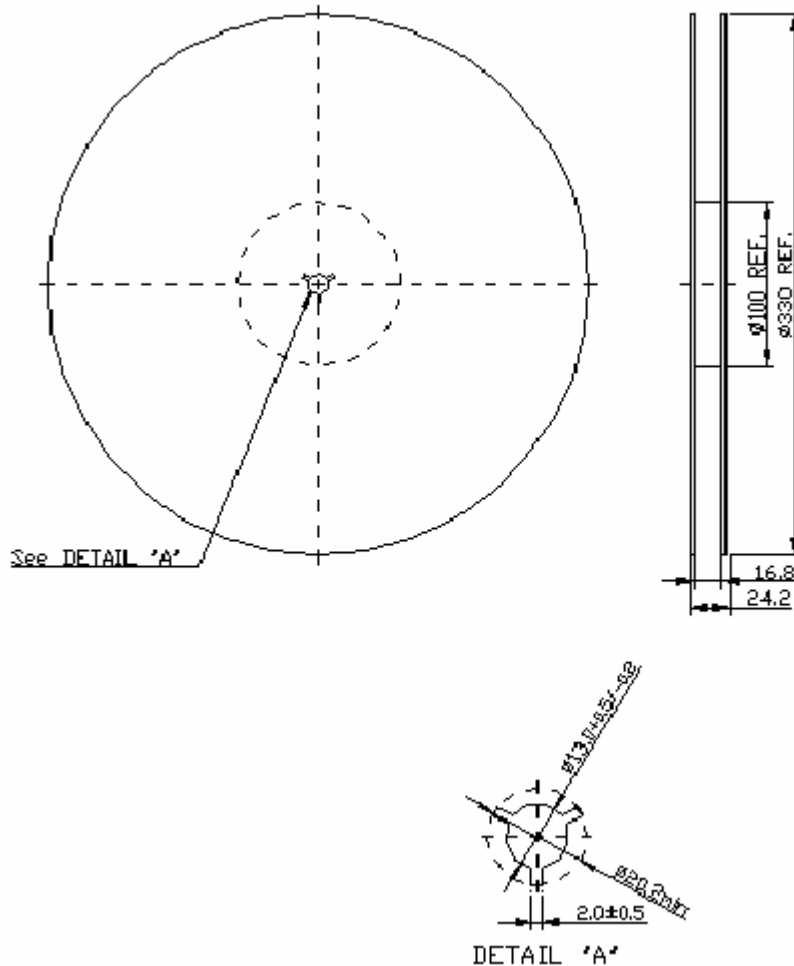
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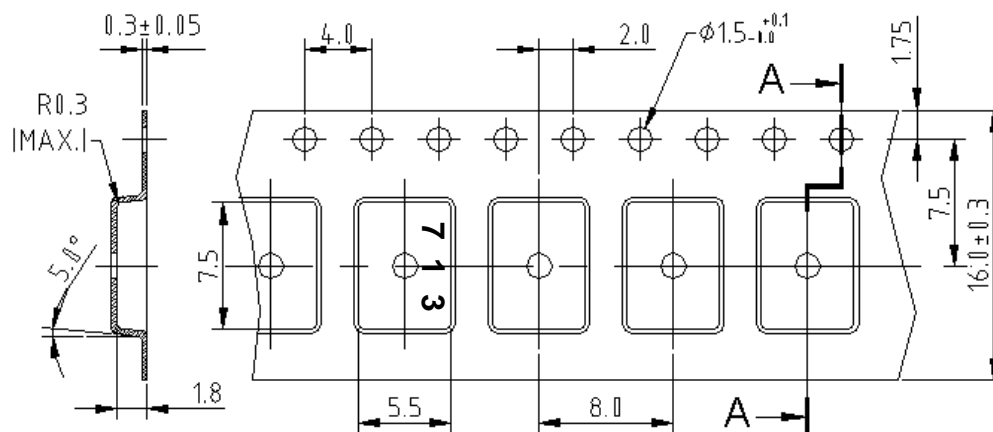
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G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



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H. RECOMMENDED REFLOW PROFILE:

