

SAW Filter 118.30MHz
Part No: MP07282

Model: TB1202A
Rev No: 2

A. MAXIMUM RATINGS:

Electrostatic Sensitive Device

1. Operating Temperature: -30°C to 85°C
2. Storage Temperature: -40°C to 85°C
3. Input Power: 10dBm
4. DC Voltage: 5V
5. Implementation of IIP3: 28dBm min
6. Moisture Sensitivity Level: Level1 (MSL1)

B. ELECTRICAL CHARACTERISTICS:

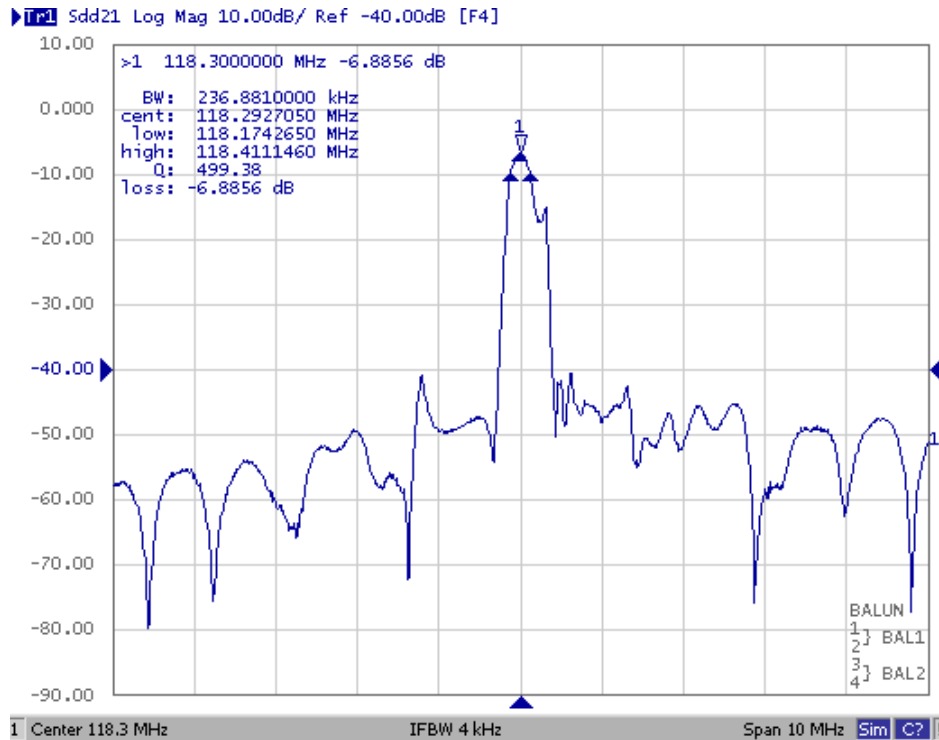
Characteristics	Min.	Typ.	Max.
Center frequency Fc MHz	-	118.3	-
Insertion Loss at Fc MHz	-	6.9	8.5
-1dB Bandwidth kHz	-	128	-
-3dB Bandwidth kHz	150	237	-
Passband Ripple (Fo ±30kHz) dB	-	0.2	1
Group Delay variation (Fo ±12.5kHz) usec	-	0.2	1
Group Delay variation (Fo ±75kHz) usec	-	0.5	4
Relative Attenuation dB			
Fc ±200kHz ~ Fc ±400kHz	5	9	-
Fc ±400kHz ~ Fc ±600kHz	10	36	-
Fc ±600kHz ~ Fc ±1.0MHz	15	34	-
Fc ±1.0MHz ~ Fc ±3.0MHz	30	35	-
Fc ±3.0MHz ~ Fc ±15.0MHz	37	41	-
Fc ±15.0MHz ~ Fc ±80.0MHz	45	50	-
Temperature Coefficient ppm/°C2		-0.036	
Source Impedance (Differential) Ω	-	200	-
Load Impedance (Differential) Ω	-	200	-

SAW Filter 118.30MHz
Part No: MP07282

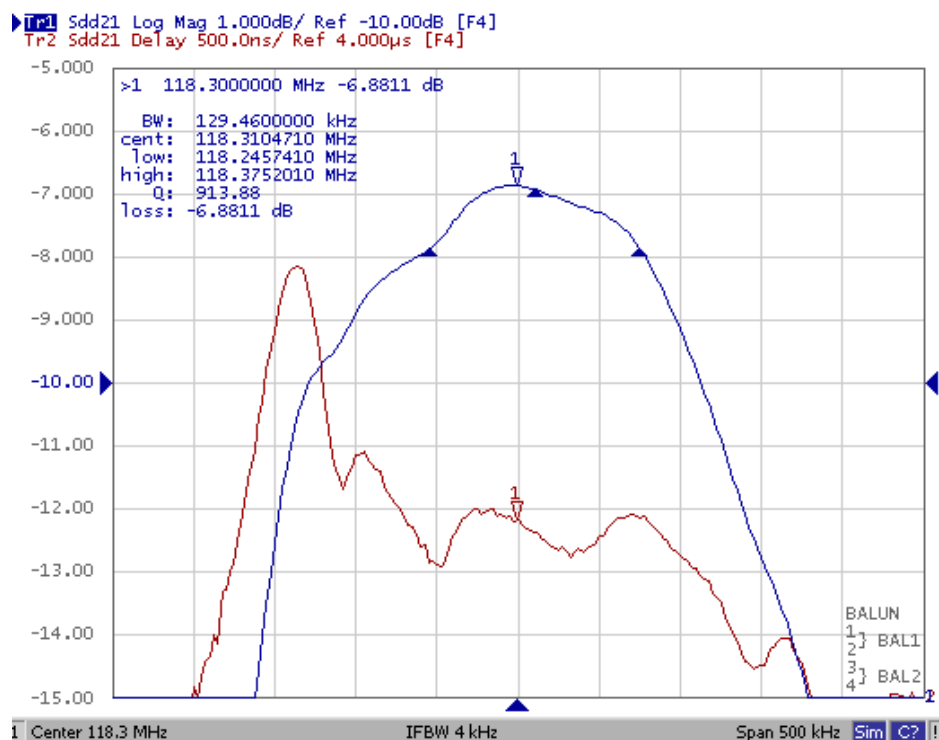
Model: TB1202A
Rev No: 2

C. FREQUENCY CHARACTERISTICS:

1. Narrow Band Response:



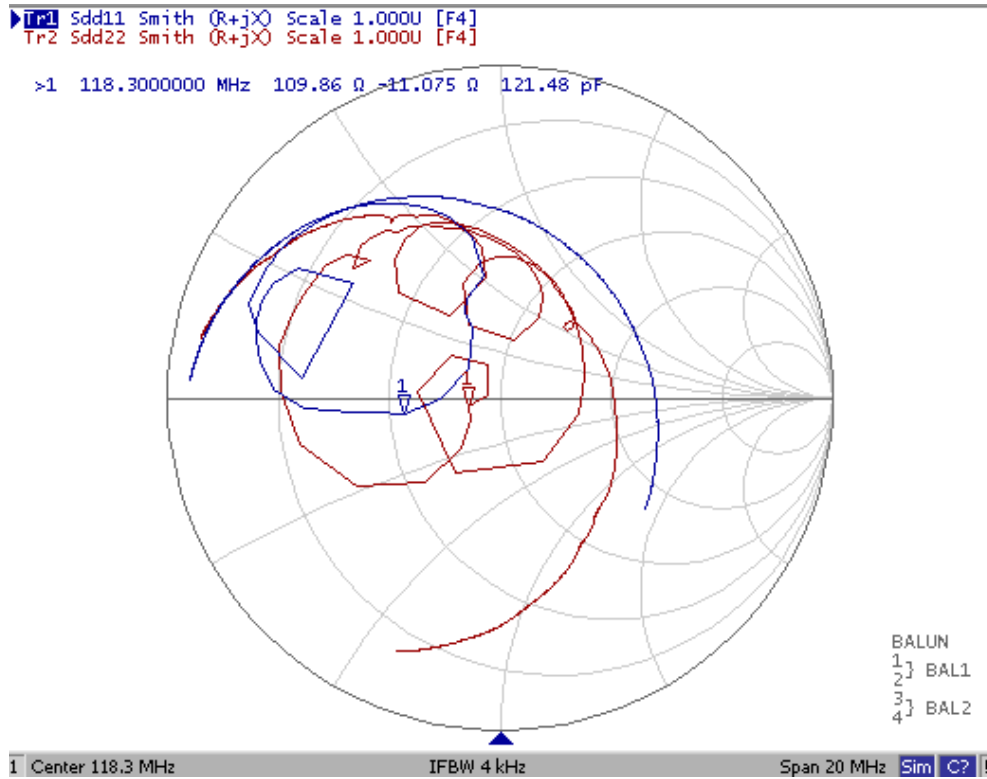
2. Pass Band Response and Group Time Delay Response:



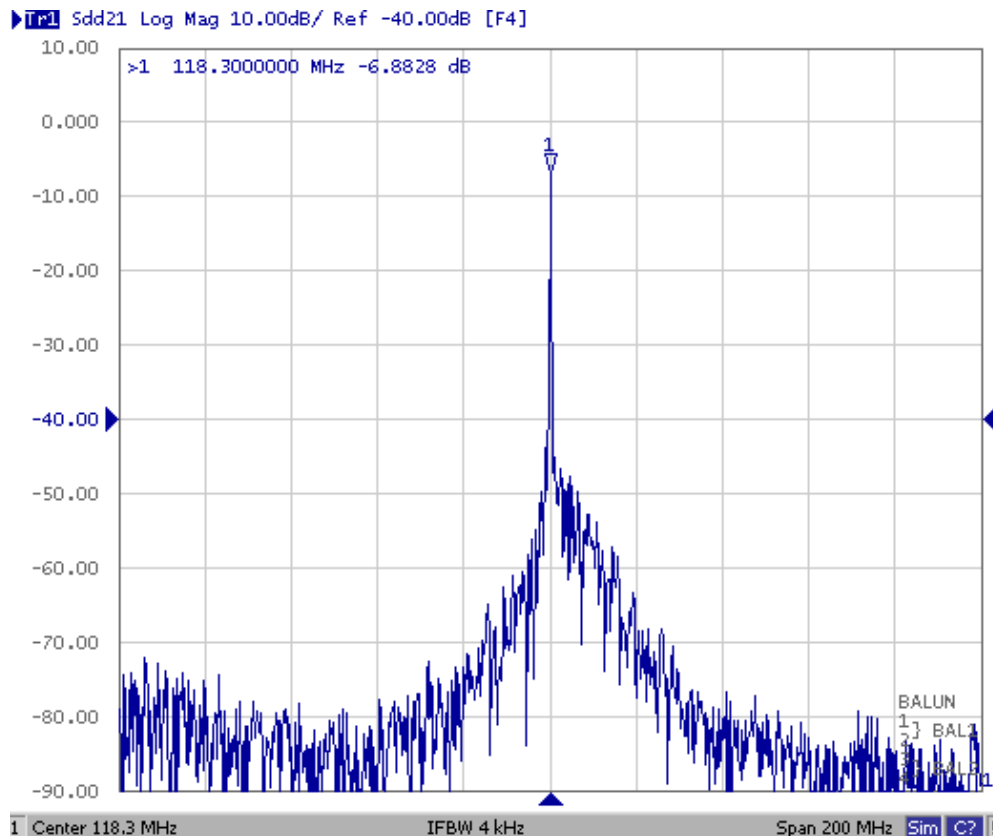
SAW Filter 118.30MHz
Part No: MP07282

Model: TB1202A
Rev No: 2

3. Smith Chart:



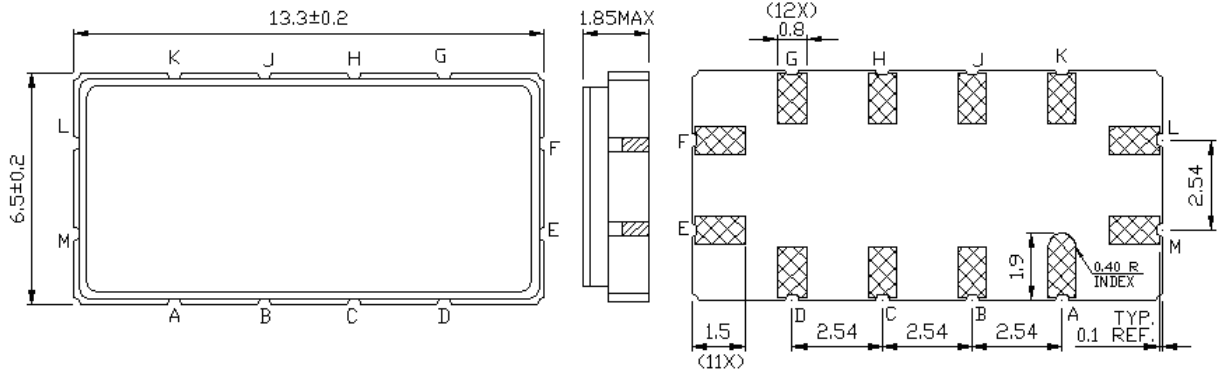
4. Wide Band Response:



SAW Filter 118.30MHz
Part No: MP07282

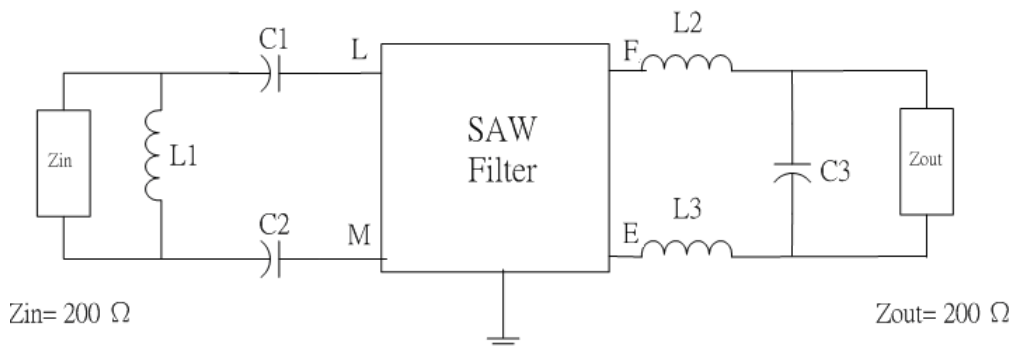
Model: TB1202A
Rev No: 2

D. OUTLINE DRAWING:



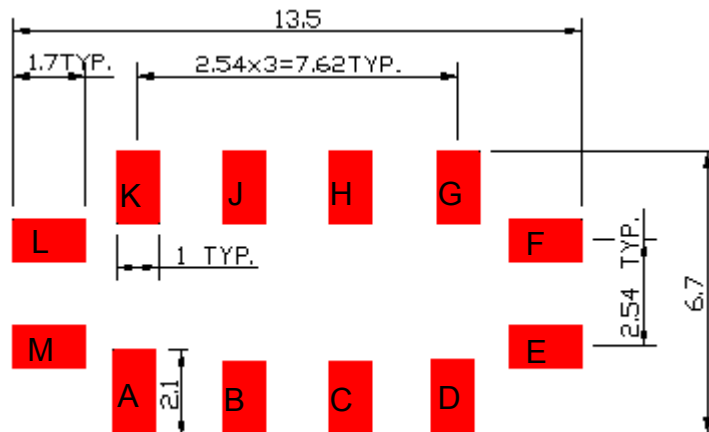
- L: Input
- M: Balanced Input
- E: Output
- F: Balanced Output
- A, B, C, D, G, H, J, K: Ground

E. MATCHING CIRCUIT:



$L1 = L2 = 150\text{nH} + 15\text{nH}$, $L3 = L4 = 120\text{nH} + 15\text{nH}$, $C1 = 18\text{pF}$, $C2 = 24\text{pF}$

F. PCB FOOTPRINT:

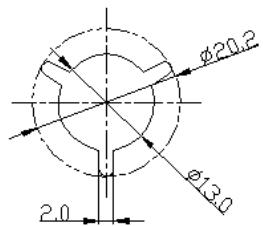
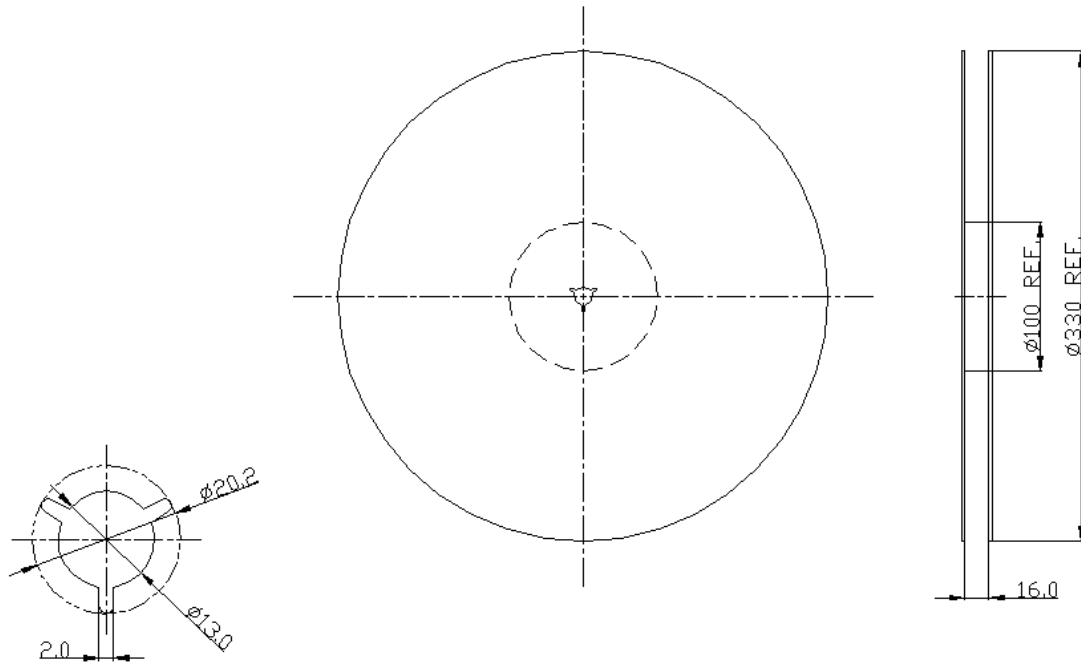


SAW Filter 118.30MHz
Part No: MP07282

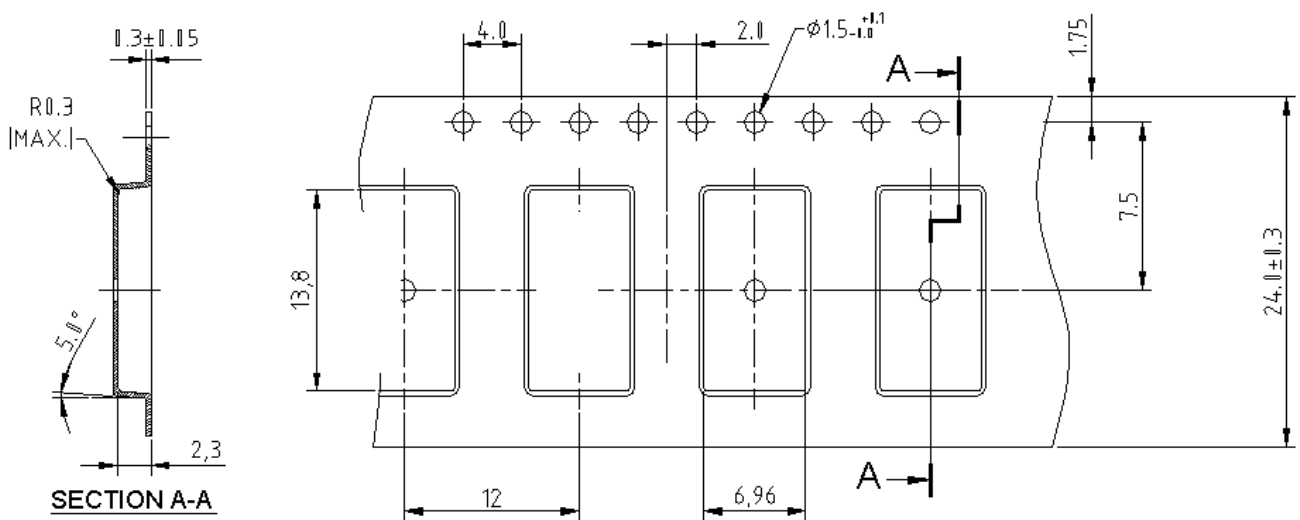
Model: TB1202A
Rev No: 2

G. PACKING:

1. Reel Dimension



2. Tape Dimension



SAW Filter 118.30MHz
Part No: MP07282

Model: TB1202A
Rev No: 2

H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 260°C +0/-5°C peak (20 ~ 40 sec).
4. Time: 2 times.

