

SAW Filter 1960.0MHz
Part No: MP07828

Model: TA1870C
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Operating temperature range: -30°C to +90°C
2. Storage temperature range: -40°C to +100°C
3. Maximum Input Power: +10dBm
4. Maximum DC Voltage: ±5V
5. Moisture Sensitivity Level: Level 1

B. ELECTRICAL CHARACTERISTICS:

1. Terminating source impedance: $Z_S = 50\Omega$ (Single-ended)
2. Terminating load impedance: $Z_L = 50 \parallel 4.7nH \Omega$ (Single-ended)

Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency		MHz	-	1960	-
Insertion Loss (*1)	1930 ~ 1990MHz	dB	-	2.8	4.0
Amplitude ripple	1930 ~ 1990MHz	dB	-	1.3	2.7
VSWR(Input)	1930 ~ 1990MHz	-	-	1.9	2.2
VSWR(Output)	1930 ~ 1990MHz	-	-	2.0	2.3
Attenuation:					
DC ~ 960MHz		dB	40	45	-
1558 ~ 1608MHz		dB	35	40	-
1710 ~ 1850MHz		dB	35	40	-
1850 ~ 1910MHz		dB	35	39	-
2020 ~ 2070MHz		dB	7	27	-
2070 ~ 2400MHz		dB	25	33	-
2400 ~ 2500MHz		dB	33	43	-
2500 ~ 3780MHz		dB	28	40	-
3780 ~ 3980MHz		dB	30	39	-
3980 ~ 5790MHz		dB	21	31	-
5790 ~ 5970MHz		dB	21	31	-
5970 ~ 7720MHz		dB	21	31	-
7720 ~ 7960MHz		dB	17	27	-
7960 ~ 8000MHz		dB	17	27	-

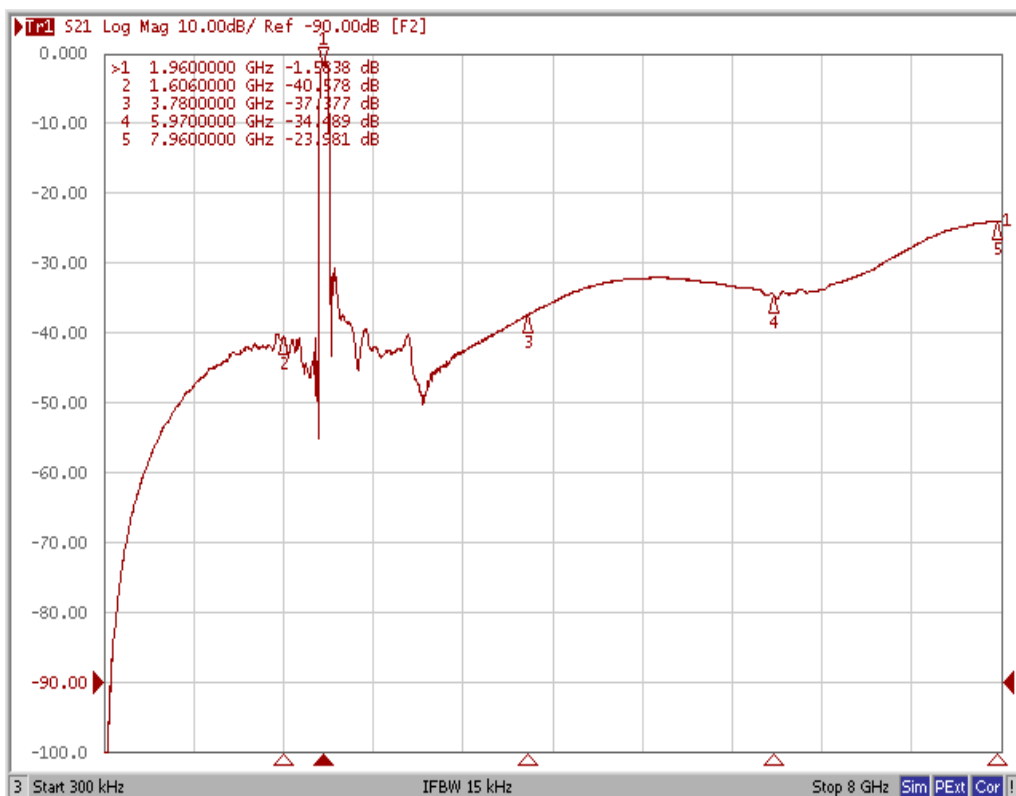
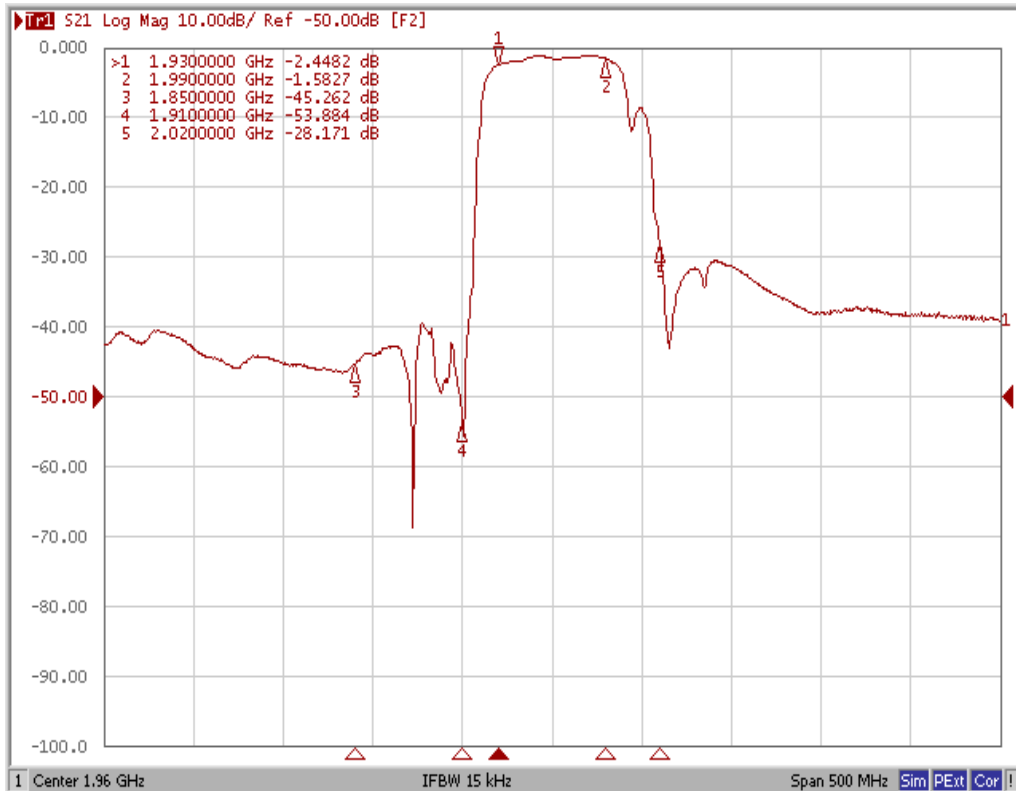
(*1) Specification of insertion loss excludes loss that comes from the test board.

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C. FREQUENCY CHARACTERISTIC:

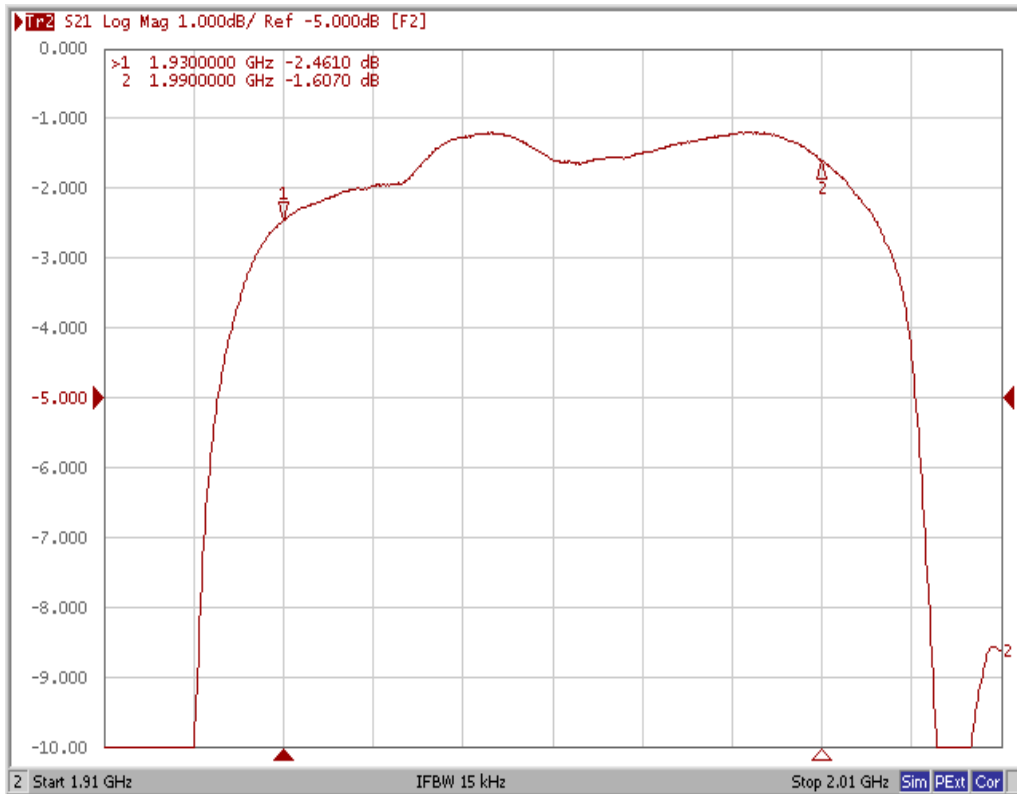
1. Frequency Response



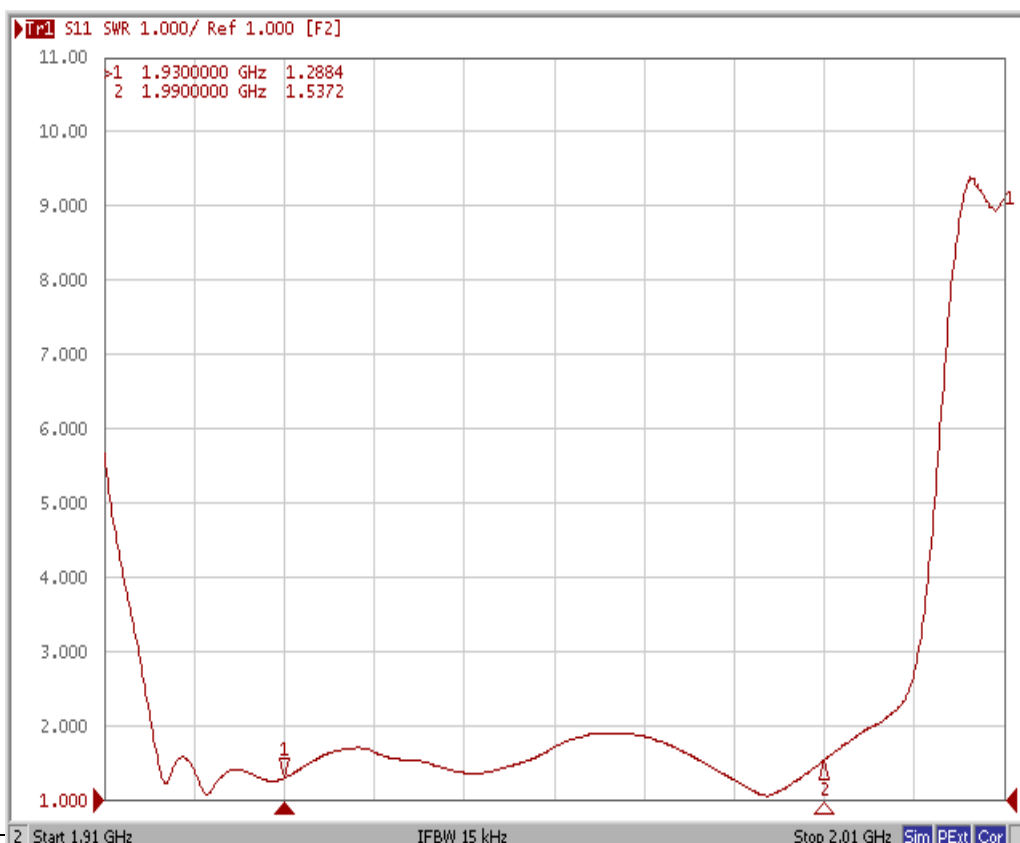
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2. Ripple



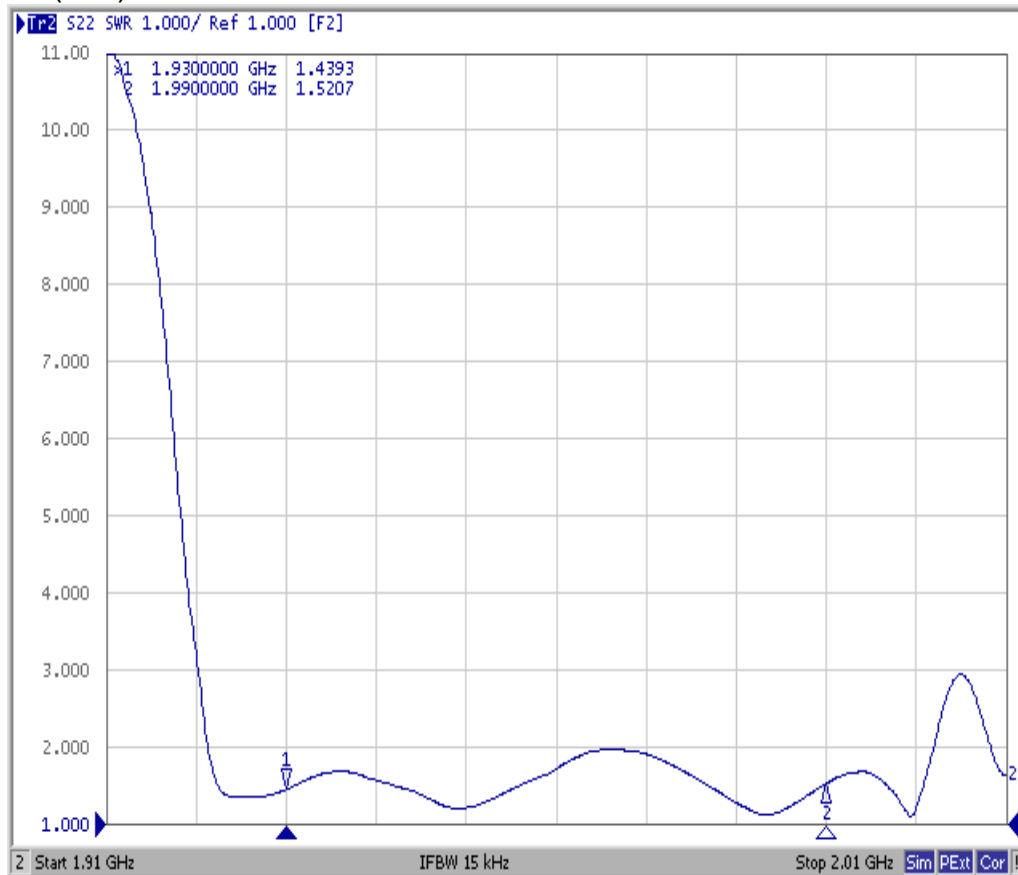
3. VSWR (S11)



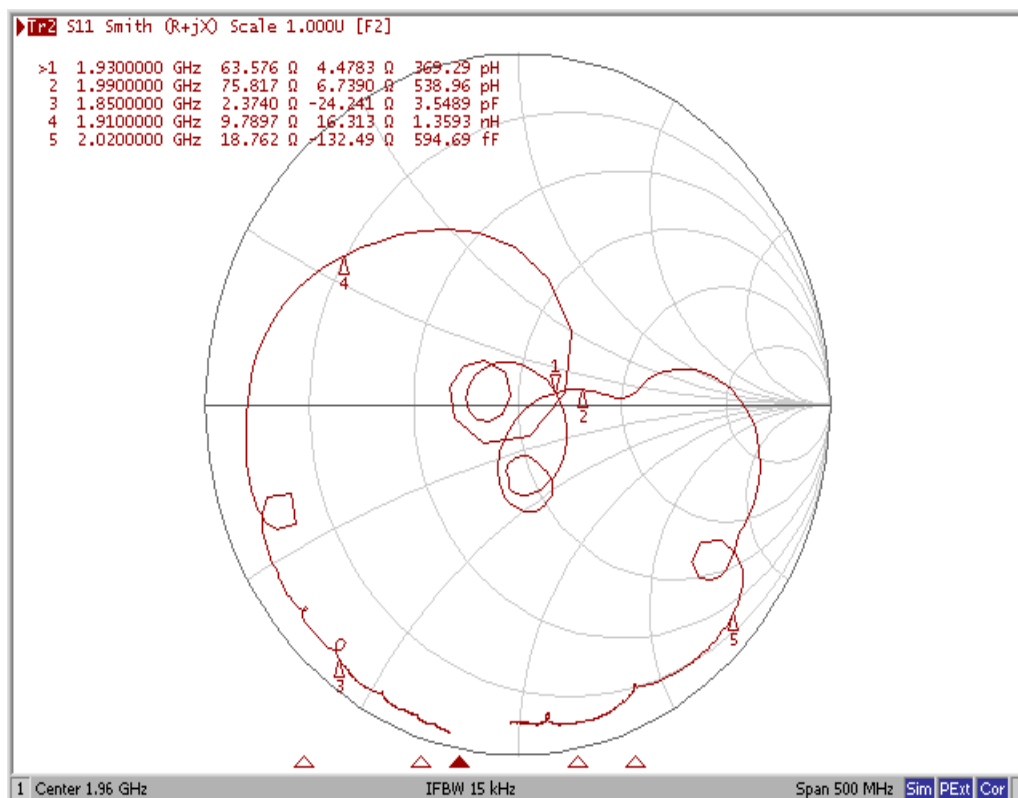
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4. VSWR (S11)



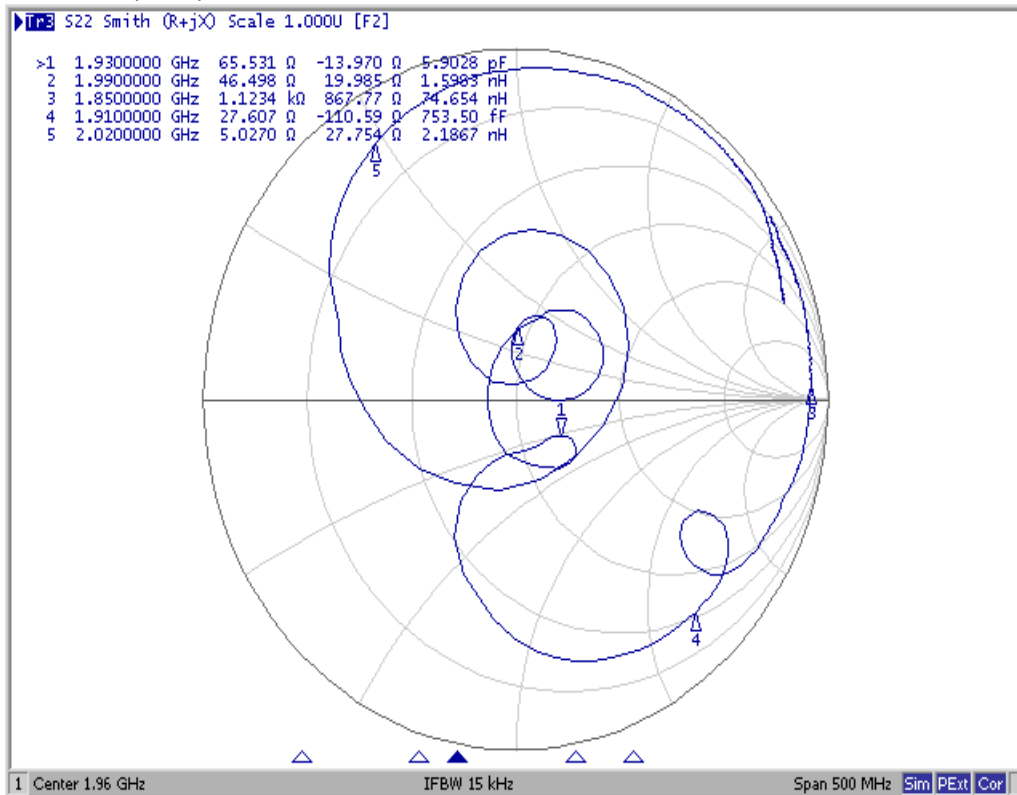
5. Smith Chart (S11)



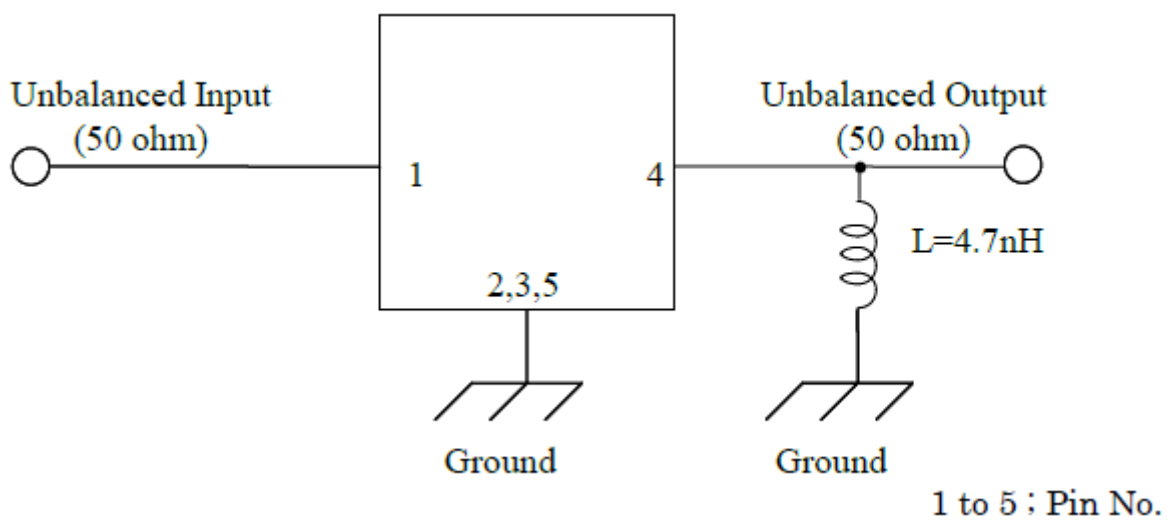
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6. Smith Chart (S22)



D. MEASUREMENT CIRCUIT:

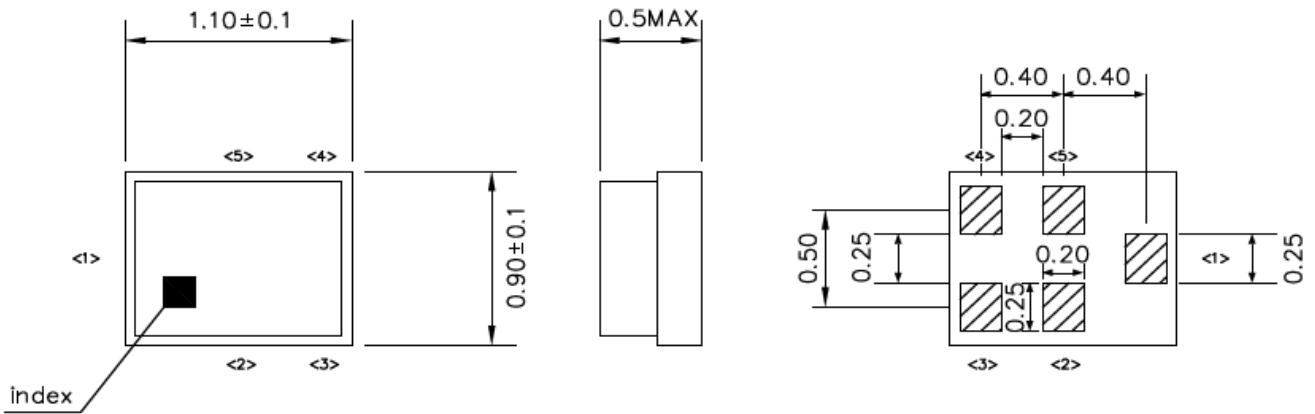


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E. OUTLINE DRAWING:

Device size: 1.1typ. x 0.9typ. x 0.5max.



Unit : mm

Pin Configuration

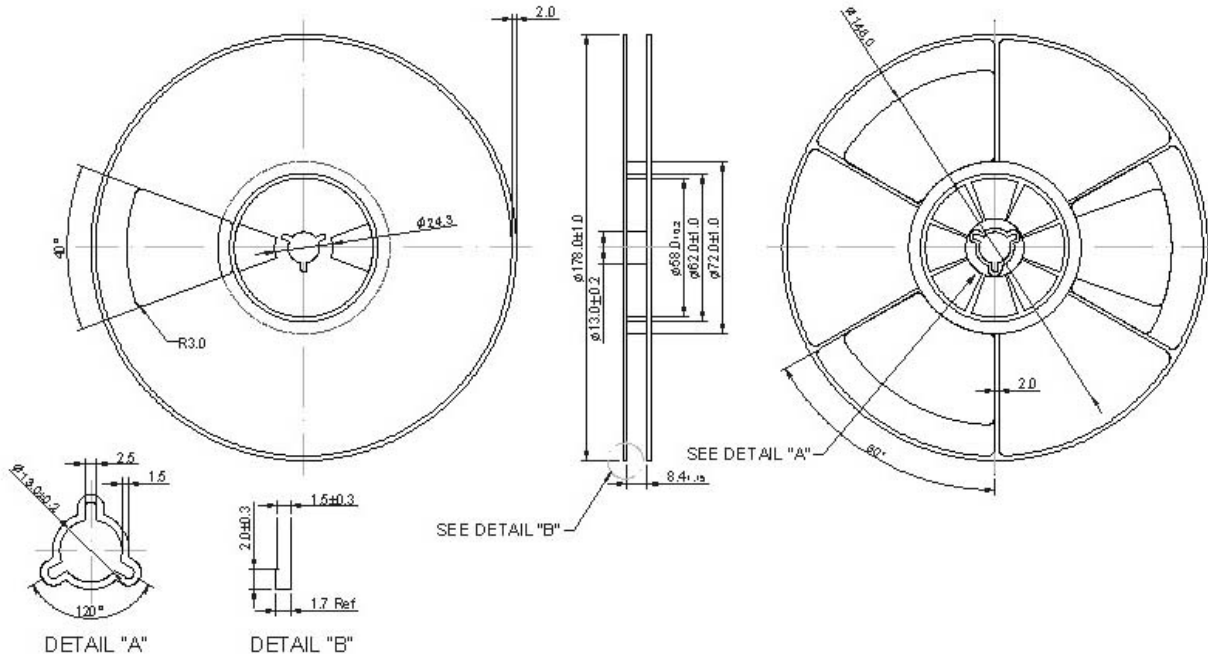
Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

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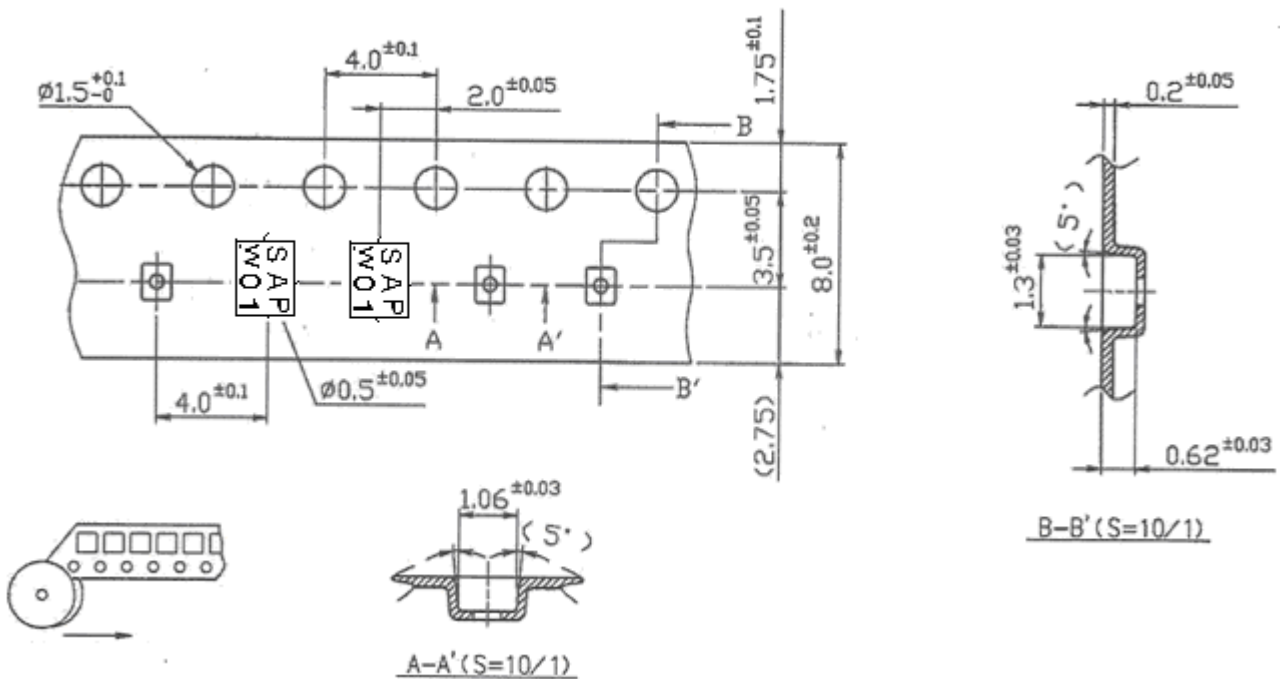
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F. PACKING:

1. Reel Dimension



2. Tape Dimension



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G. 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.

