

**SAW Filter 1842.50MHz**

**Model: TA1857A**

**Part No: MP07839**

**Rev No: 1**

**A. MAXIMUM RATING:**

Electrostatic Sensitive Device (ESD)

Operating Temperature: -30°C to +85°C

**B. ELECTRICAL CHARACTERISTICS:**

1. Terminating source impedance:  $Z_S = 50\Omega$  (Unbalanced)
2. Terminating load impedance:  $Z_L = 100 // 18nH \Omega$  (Balanced / differential)

Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency		MHz	-	1842.5	-
Insertion Loss (*1)	1805~1880MHz	dB	-	3.2	4.5
Amplitude Ripple	1805~1880MHz	dB	-	1.9	3.3
VSWR (Input)	1805~1880MHz	-	-	1.8	2.3
VSWR (Output)	1805~1880MHz	-	-	2.0	2.3
Amplitude Balance ( $ S_{21} / S_{31} $ )	1805~1880MHz	dB	-1.3	+0.8/-0.5	+1.3
Phase Balance ( $(\Phi_{S21}-\Phi_{S31})+180$ )	1805~1880MHz	deg.	+12	+3/-3	-12
Attenuation:					
10~1300 MHz		dB	40	63	-
1300~1705 MHz		dB	40	53	-
1705~1785 MHz		dB	41	45	-
1920~1980 MHz		dB	24	28	-
1980~3000 MHz		dB	30	38	-
3000~5000 MHz		dB	30	50	-
5000~6000 MHz		dB	30	48	-

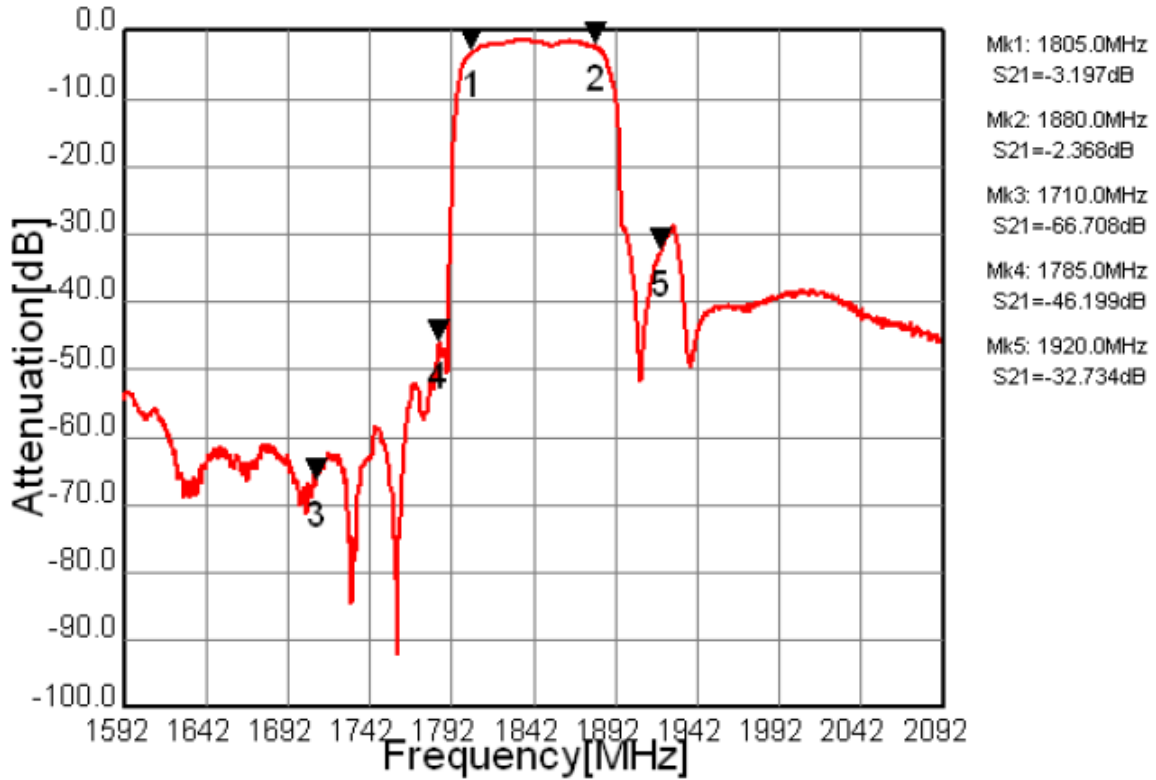
(\*1) Specification of insertion loss includes loss that comes from the test board. (Value: 0.15dB)

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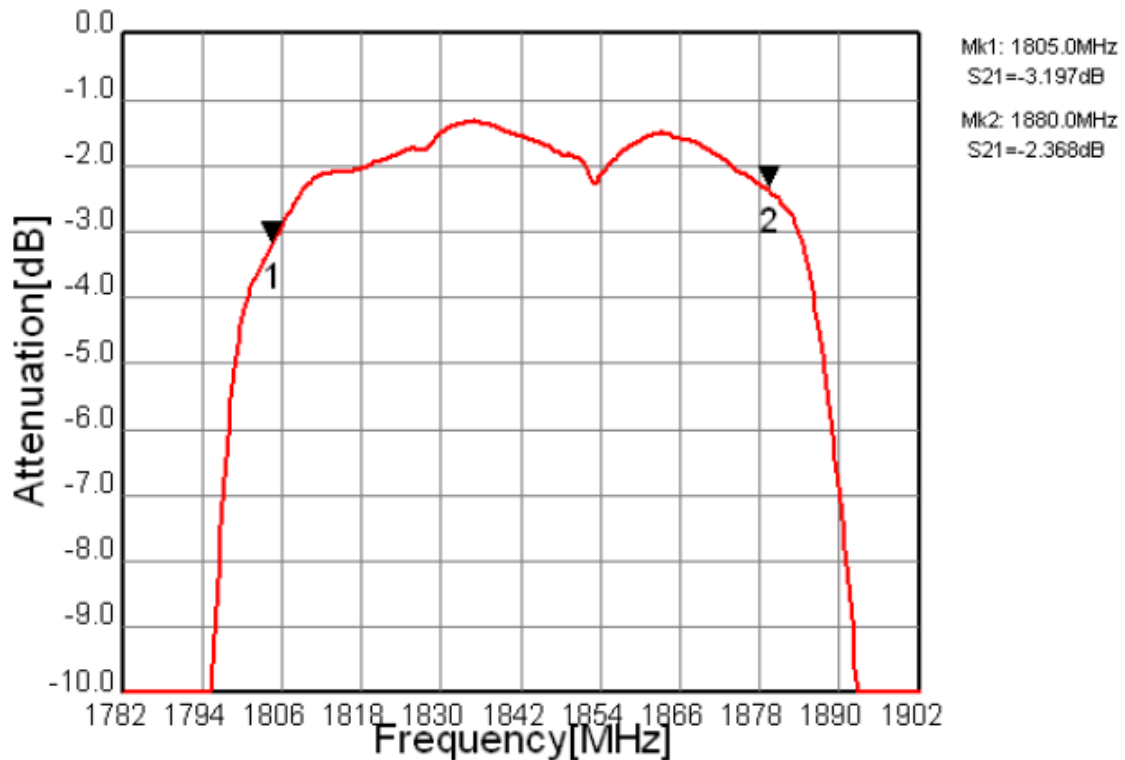
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**C. FREQUENCY CHARACTERISTICS:**

1. Pass-band



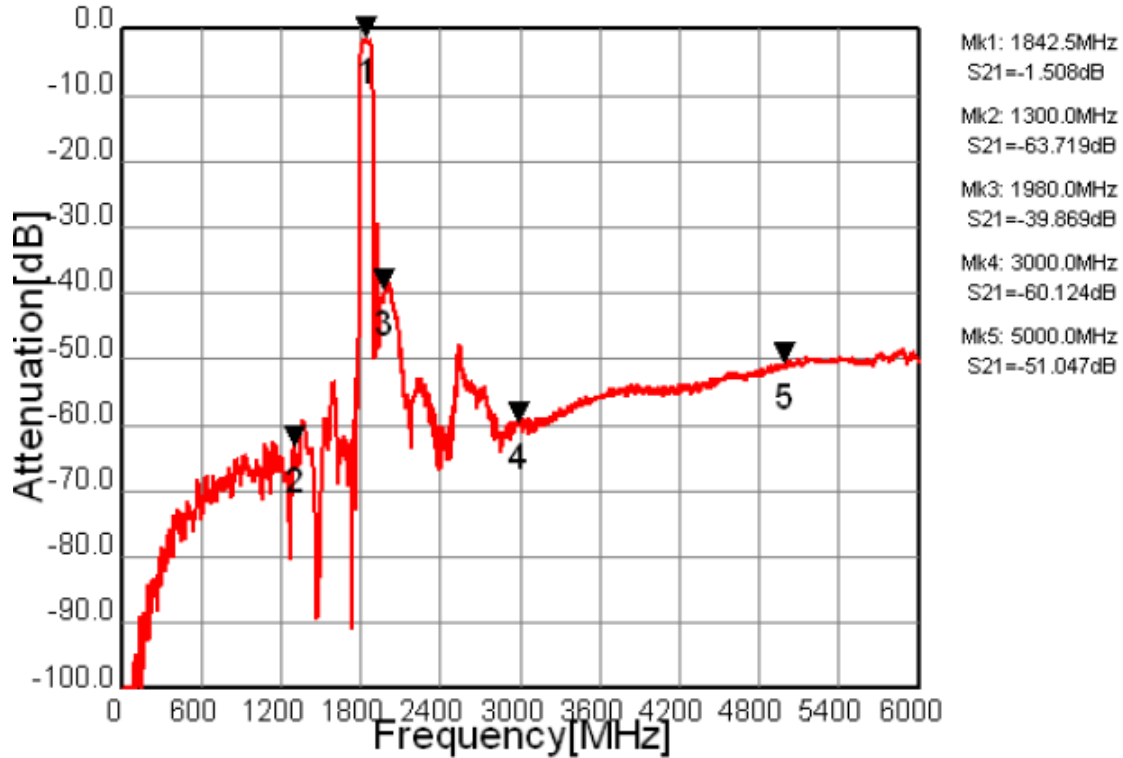
2. In-band



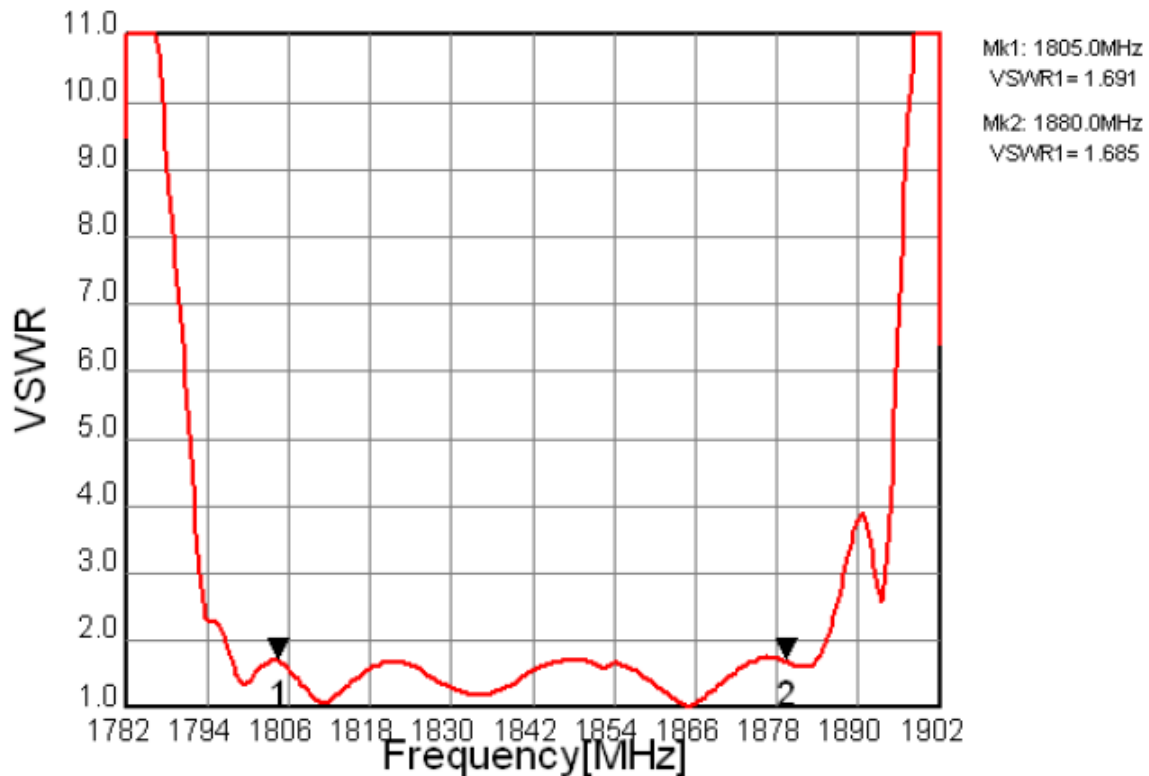
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3. Wide-band



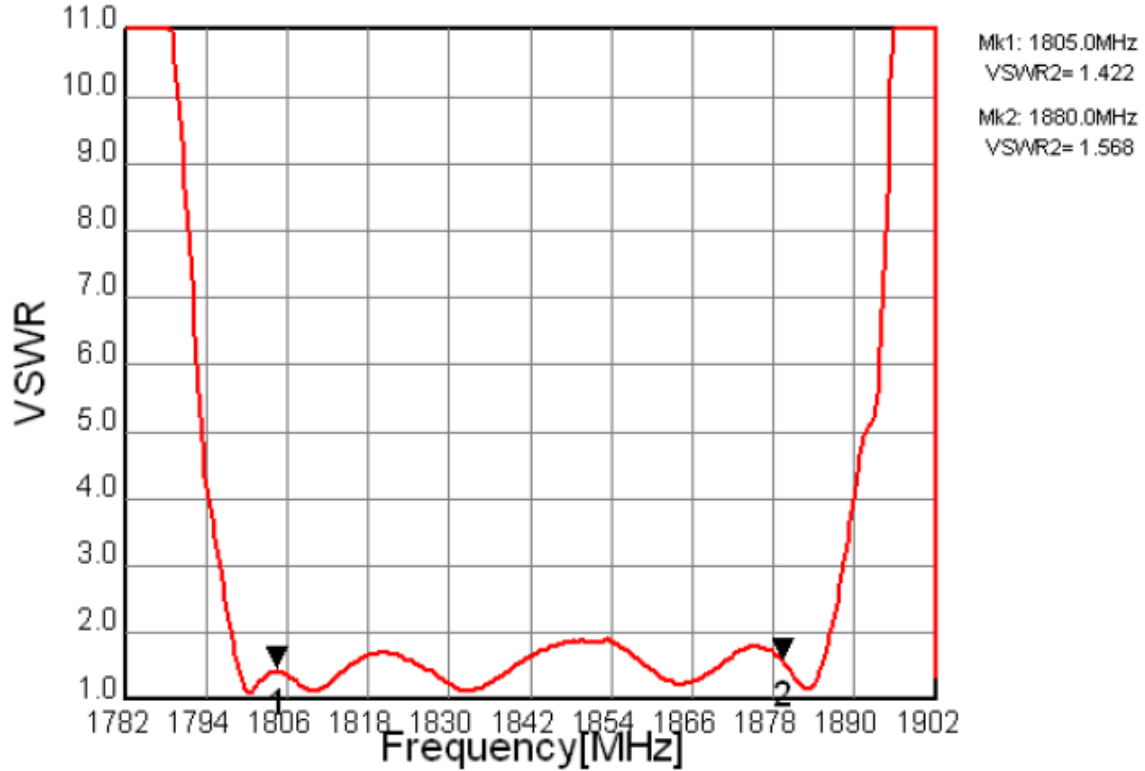
4. VSWR (Input)



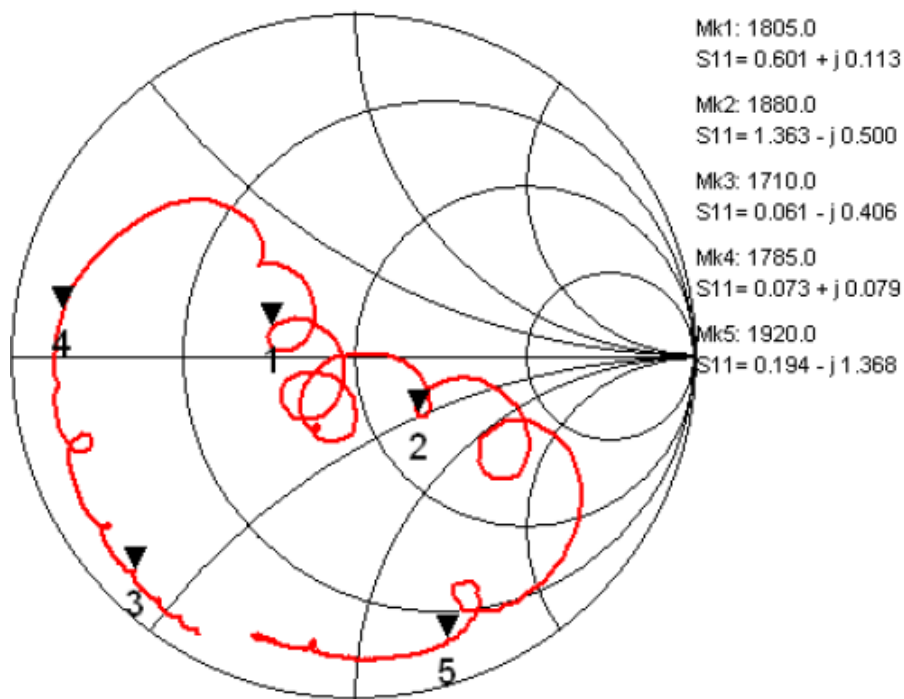
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5. VSWR (Output)



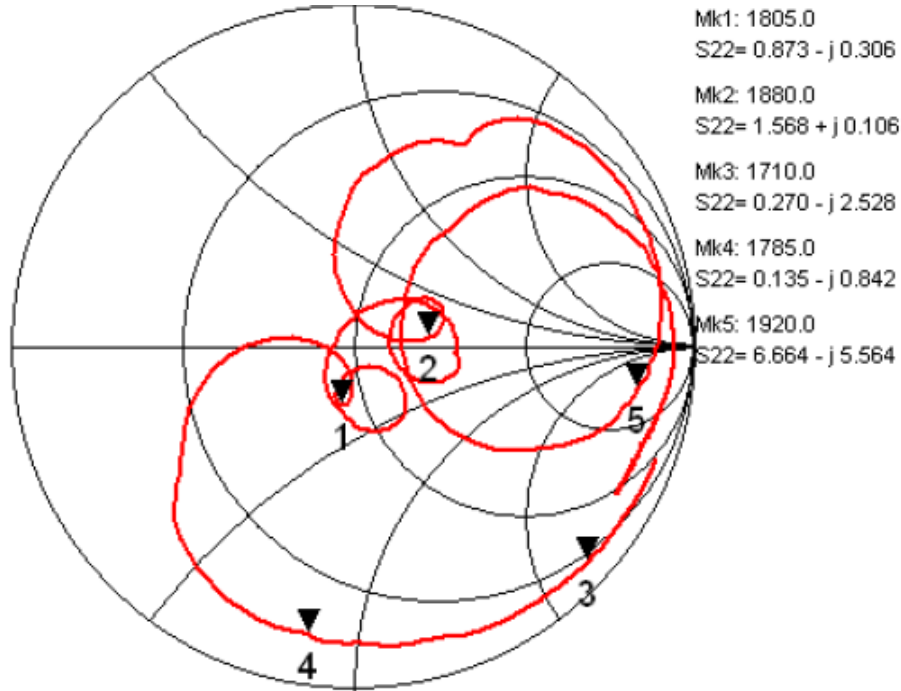
6. Input Impedance



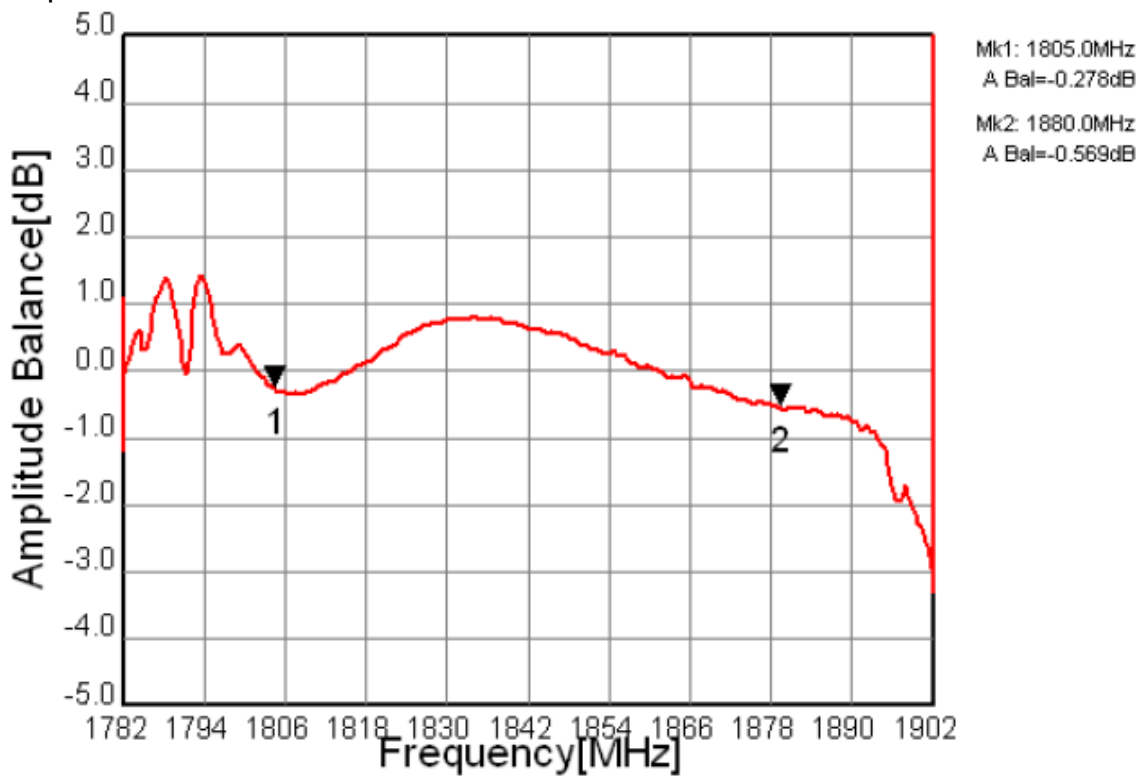
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7. Output Impedance



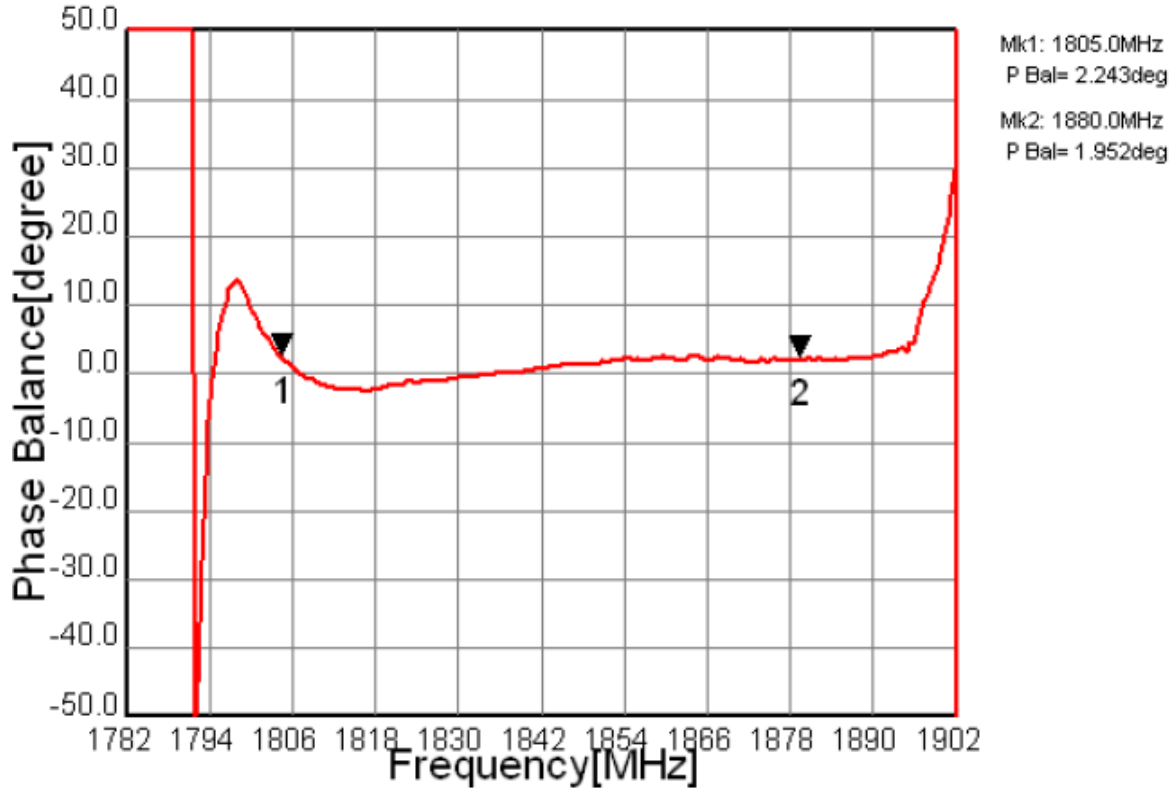
8. Amplitude Balance



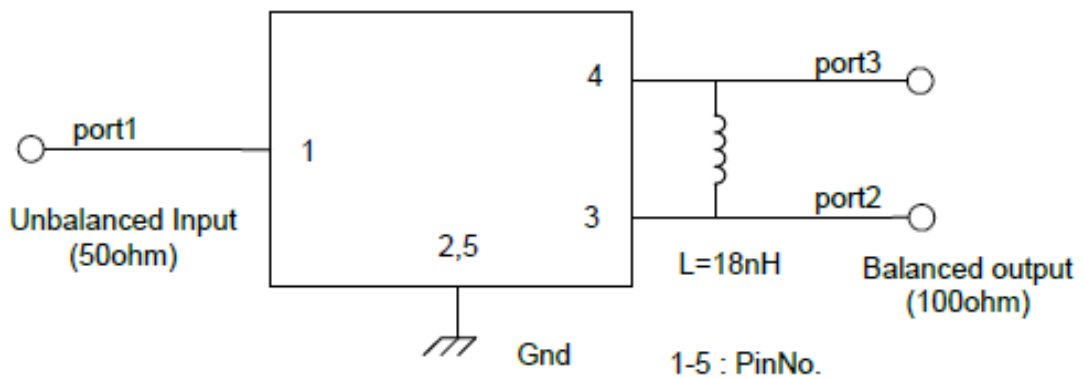
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9. Phase Balance



**D. MEASUREMENT CIRCUIT:**



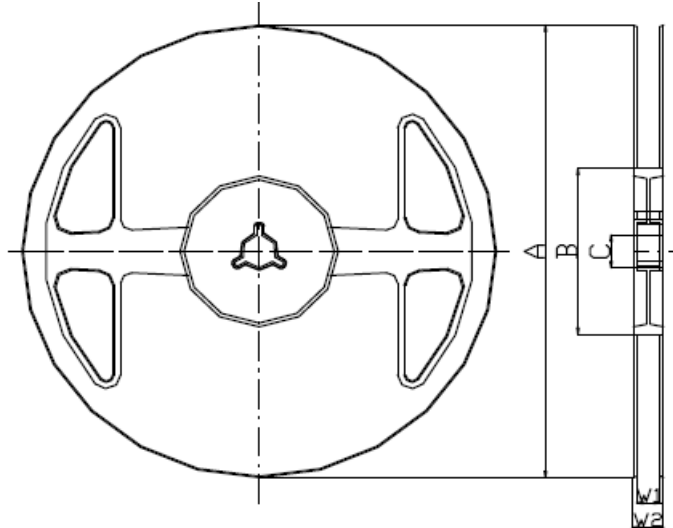


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**F. PACKING:**

1. Reel Dimension



**Materials of Reel**

Material : Polvstvrene + Carbon

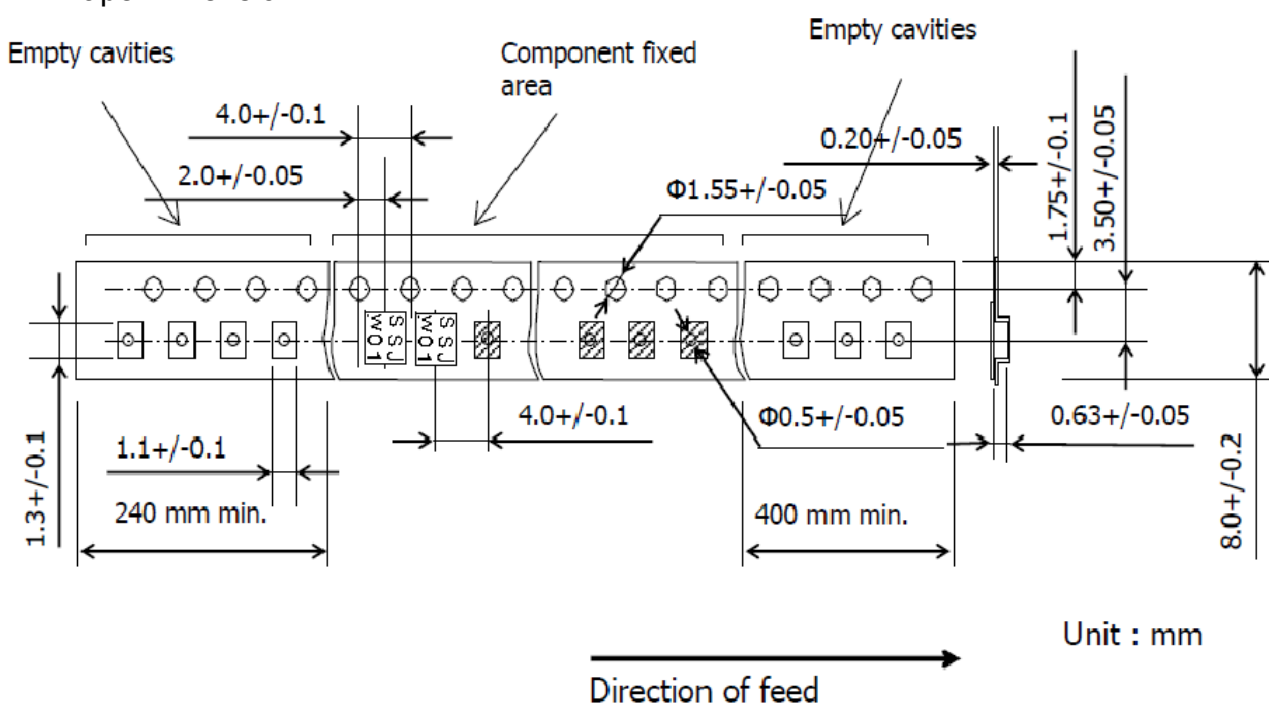
Color : Black

Surface resistance (reference value) :  $10^9\Omega/\text{sq}$  Max.

Unit : mm

Code	Quantity	A	B	C	W1	W2
J	5,000 pcs	$\phi 180.0 +0.0/-1.5$	$\phi 66.0 +/-0.5$	$\phi 13.0 +/-0.2$	$9.0 +1.0/-0.0$	$11.4 +/-1.0$

2. Tape Dimension



Unit : mm



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**G. RECOMMENDED REFLOW PROFILE:**

