

SAW Filter 1842.50MHz

Model: TA1843D

Part No: MP08049

Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Operating temperature range: -20°C to +85°C
2. Storage temperature range: -40°C to +85°C
3. Maximum Input Power: +10dBm
4. Maximum DC Voltage: ±0V
5. Moisture Sensitivity Level: Level 3
6. ESD 50V (MM), 100V (HBM)

B. ELECTRICAL CHARACTERISTICS:

1. Terminating source impedance: $Z_S = 50 \parallel 33\text{nH } \Omega$ (Single-ended)
2. Terminating load impedance: $Z_L = 50 \parallel 12\text{nH } \Omega$ (Single-ended)

| Parameters Description | | Unit | Min. | Typ. | Max. |
|------------------------|--------------|-------------------|------|--------|------|
| Center Frequency | | MHz | - | 1842.5 | - |
| Insertion Loss (*1) | 1805~1880MHz | dB | - | 2.0 | 4.0 |
| Amplitude Ripple | 1805~1880MHz | dB _{p-p} | - | 1.0 | 3.3 |
| VSWR | Input | 1805~1880MHz | - | 1.7 | 2.3 |
| | Output | 1805~1880MHz | - | 1.6 | 2.2 |
| Attenuation: | | | | | |
| DC~960MHz | | dB | 32 | 35 | - |
| 1558~1608MHz | | dB | 32 | 36 | - |
| 1710~1785MHz | | dB | 34 | 38 | - |
| 1920~2400MHz | | dB | 25 | 37 | - |
| 2400~2500MHz | | dB | 33 | 39 | - |
| 2500~3610MHz | | dB | 25 | 35 | - |
| 3610~3760MHz | | dB | 25 | 38 | - |
| 3760~5415MHz | | dB | 20 | 35 | - |
| 5415~5640MHz | | dB | 20 | 36 | - |
| 5640~7220MHz | | dB | 18 | 27 | - |
| 7220~7520MHz | | dB | 16 | 25 | - |
| 7520~8000MHz | | dB | 14 | 23 | - |

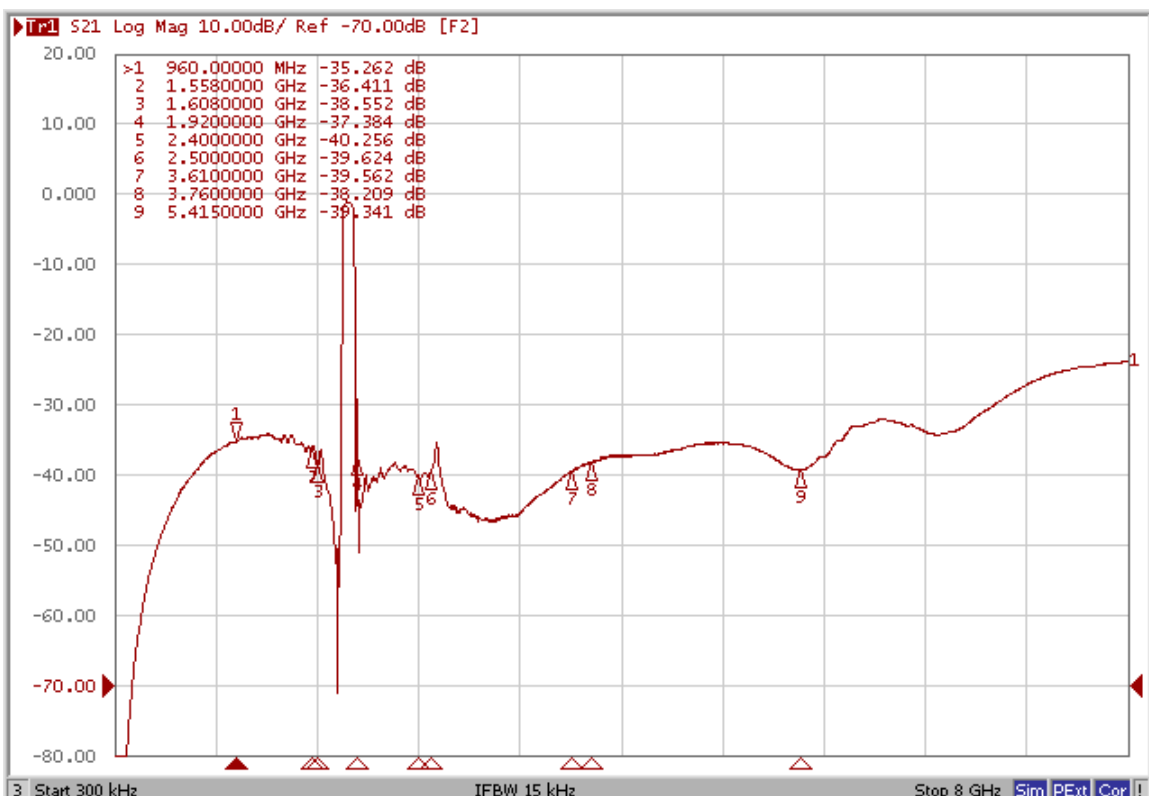
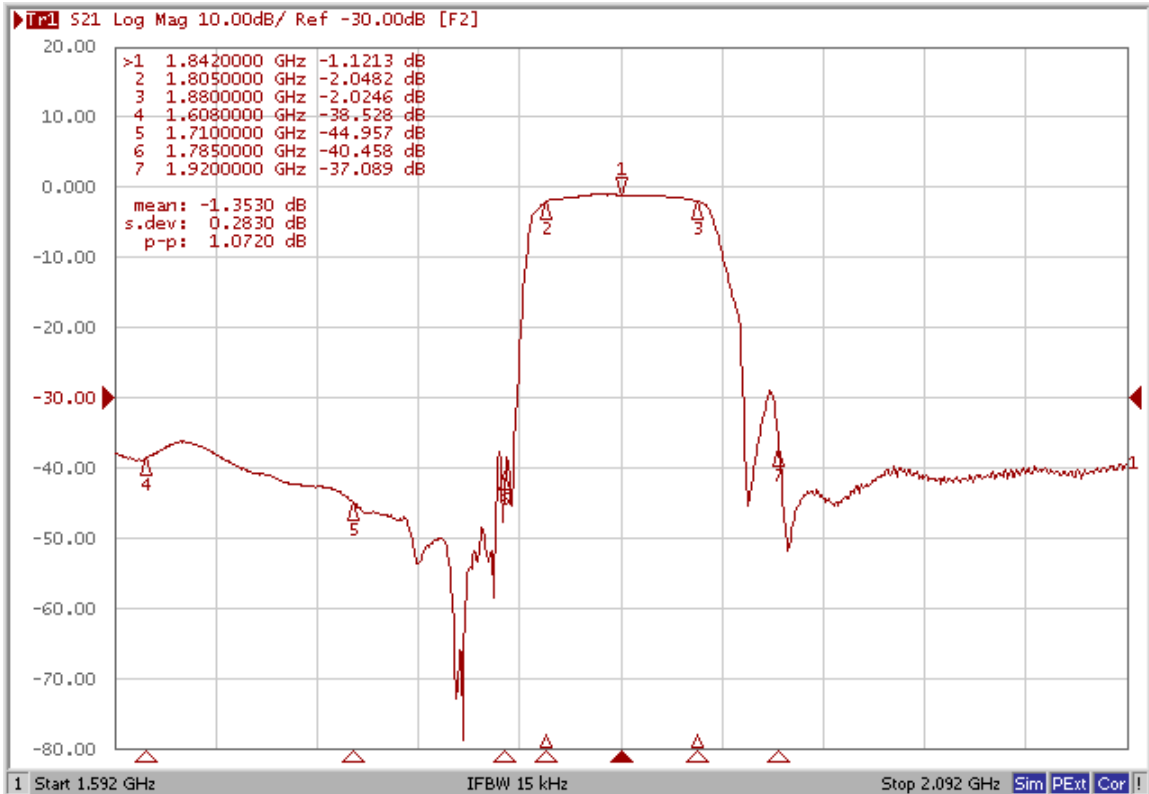
(*1) Specification of insertion loss excludes loss that comes from the test board.

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C. FREQUENCY CHARACTERISTICS:

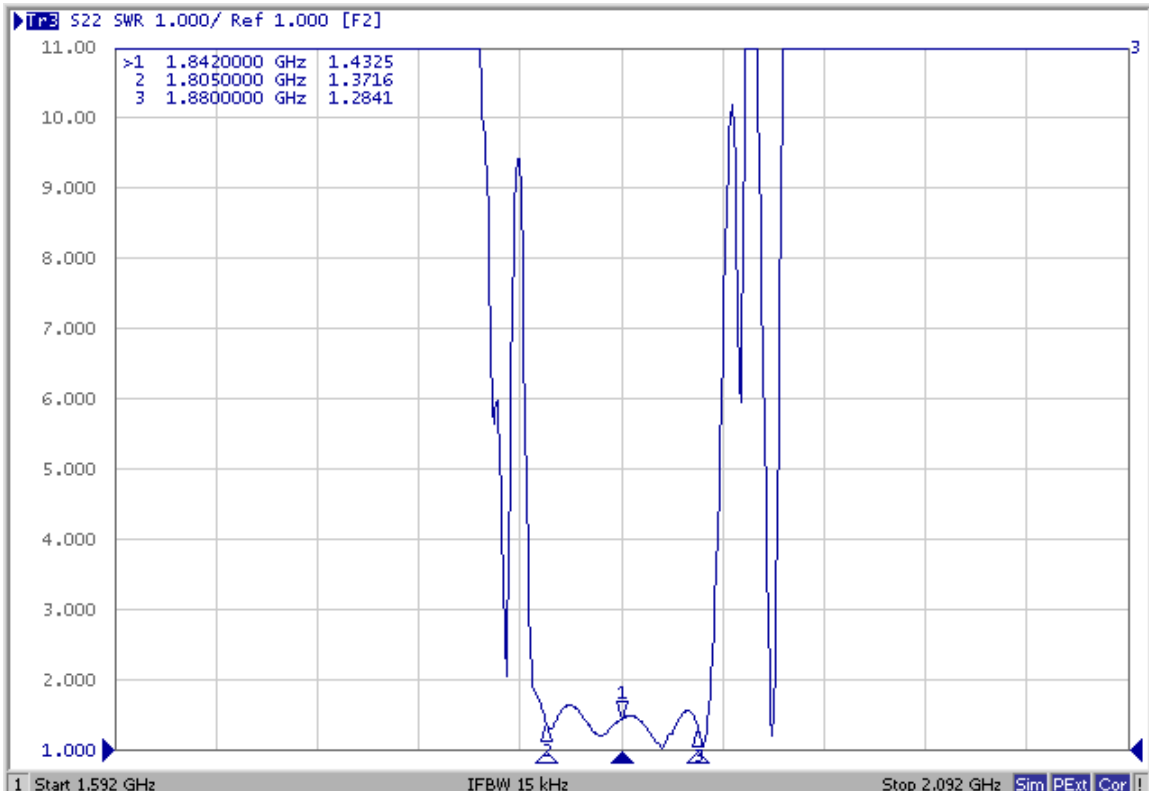
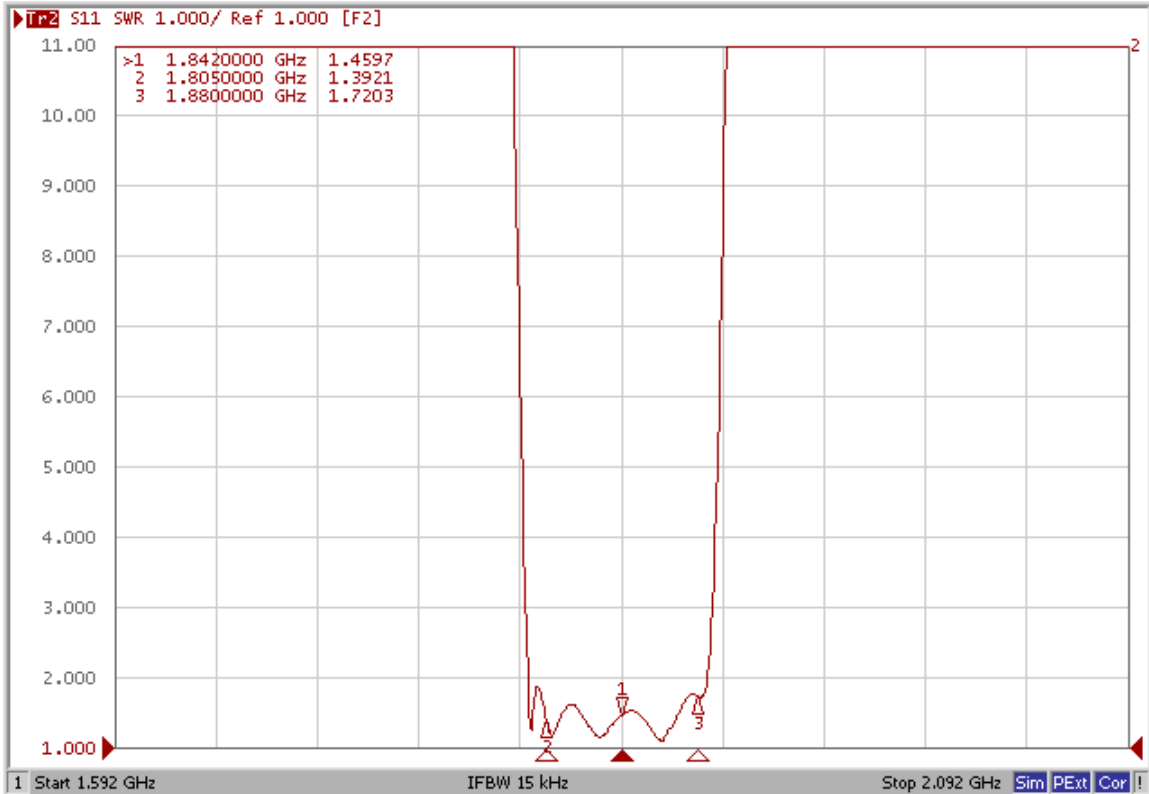
1. Frequency Response:



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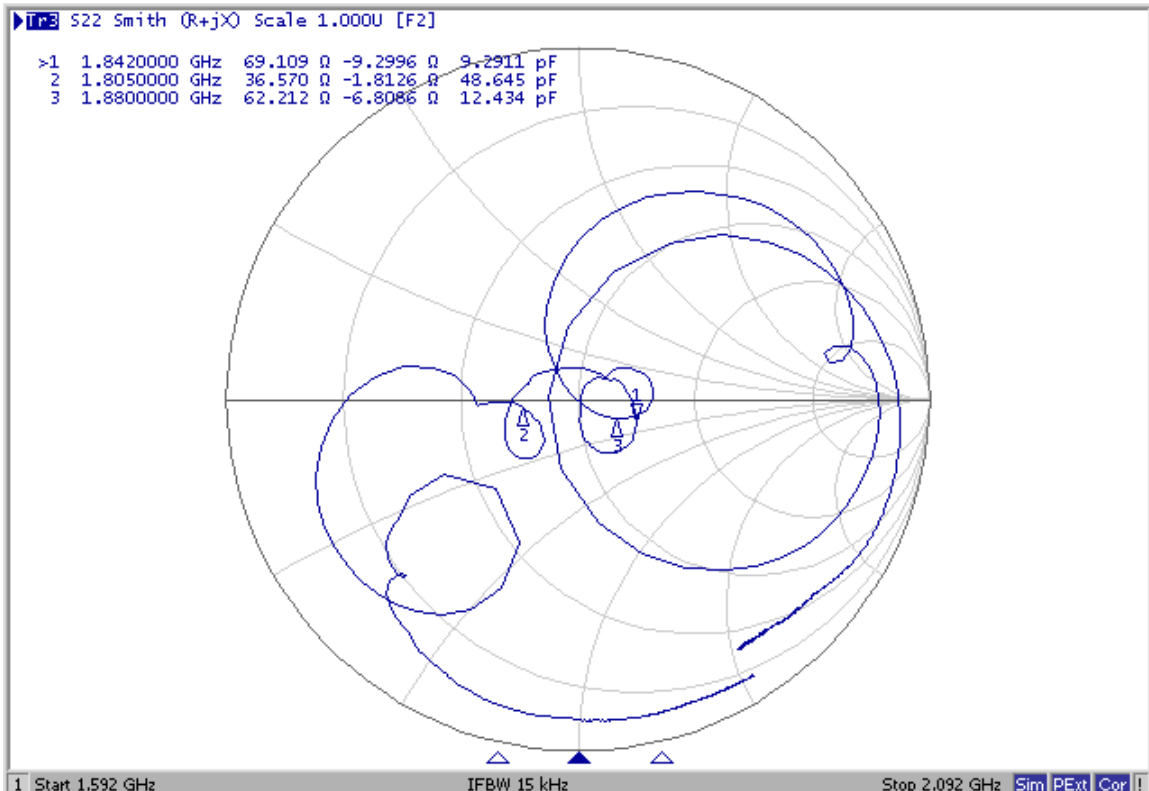
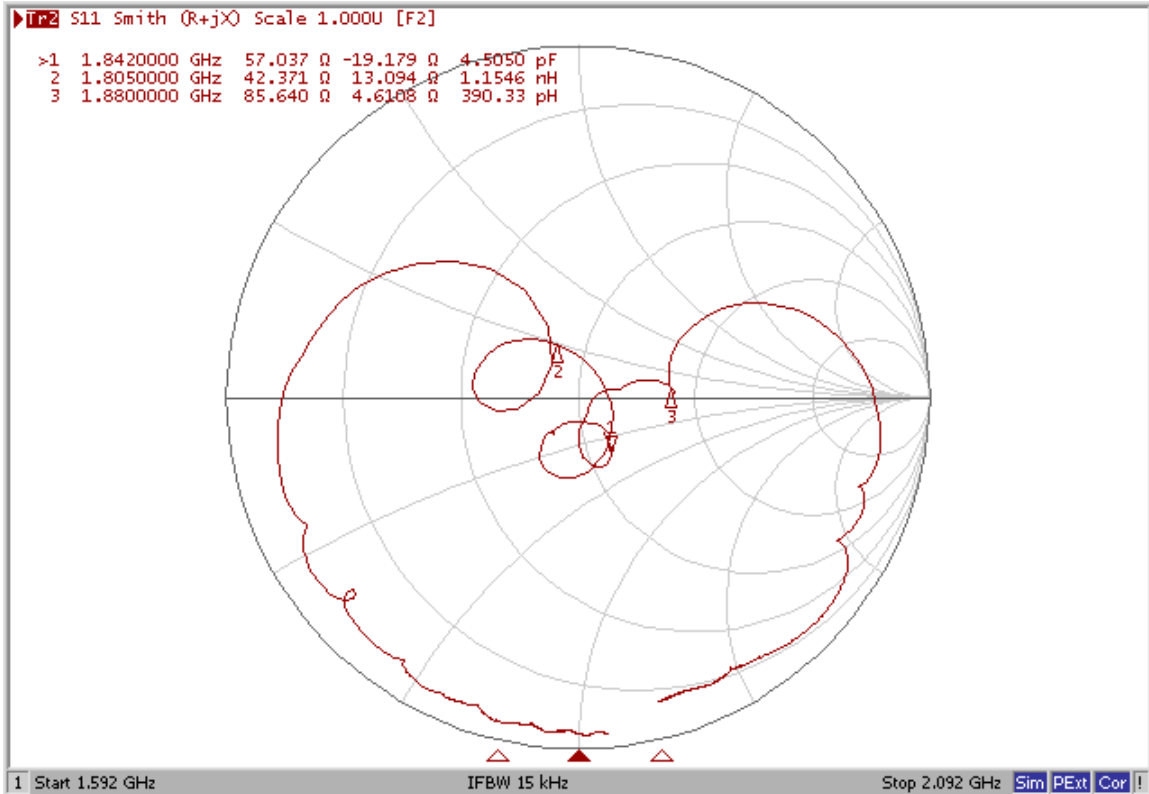
2. VSWR



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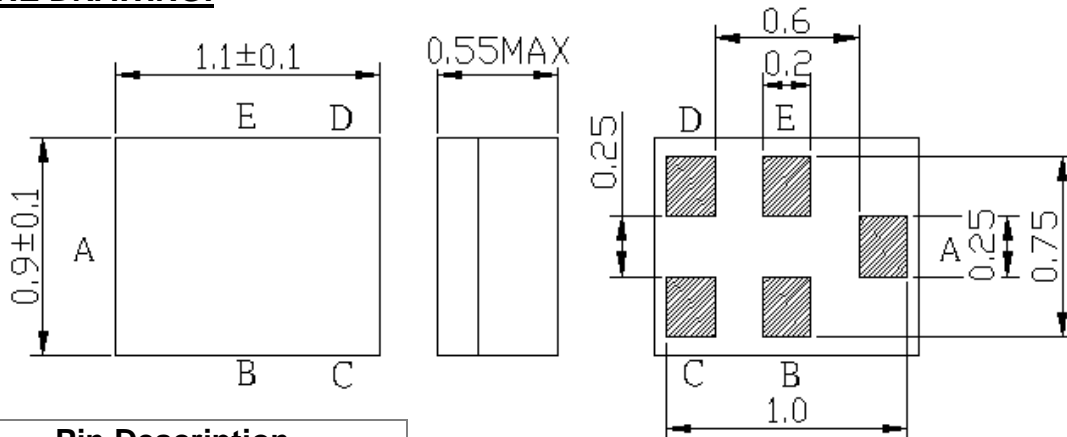
3. Smith Chart



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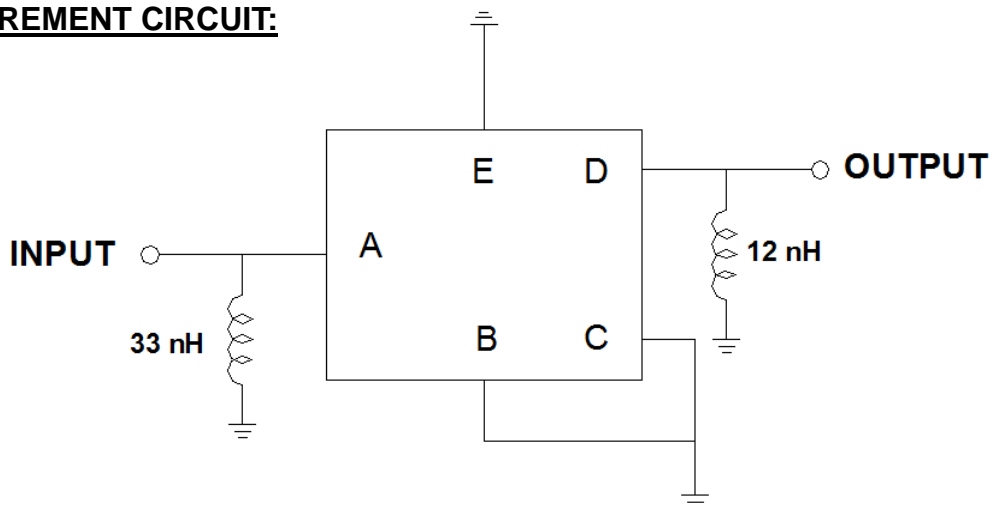
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D. OUTLINE DRAWING:



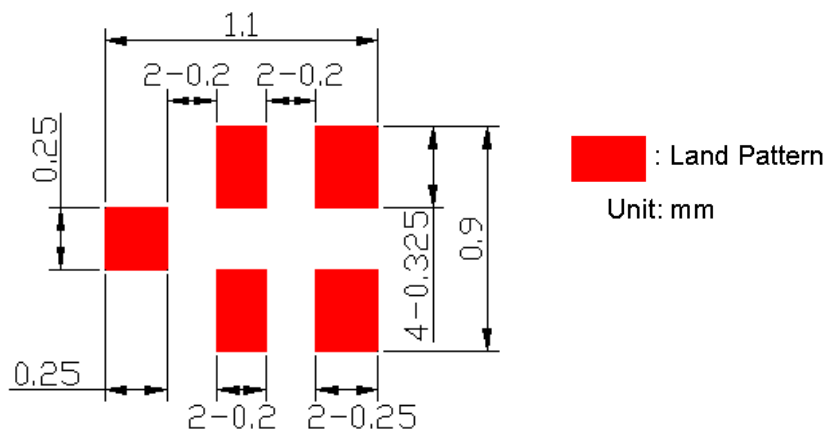
| Pin Description | |
|-----------------|--------|
| B, C, E | Ground |
| A | Input |
| D | Output |

E. MEASUREMENT CIRCUIT:



Source & Load Impedance: 50Ω

F. PCB FOOTPRINT:

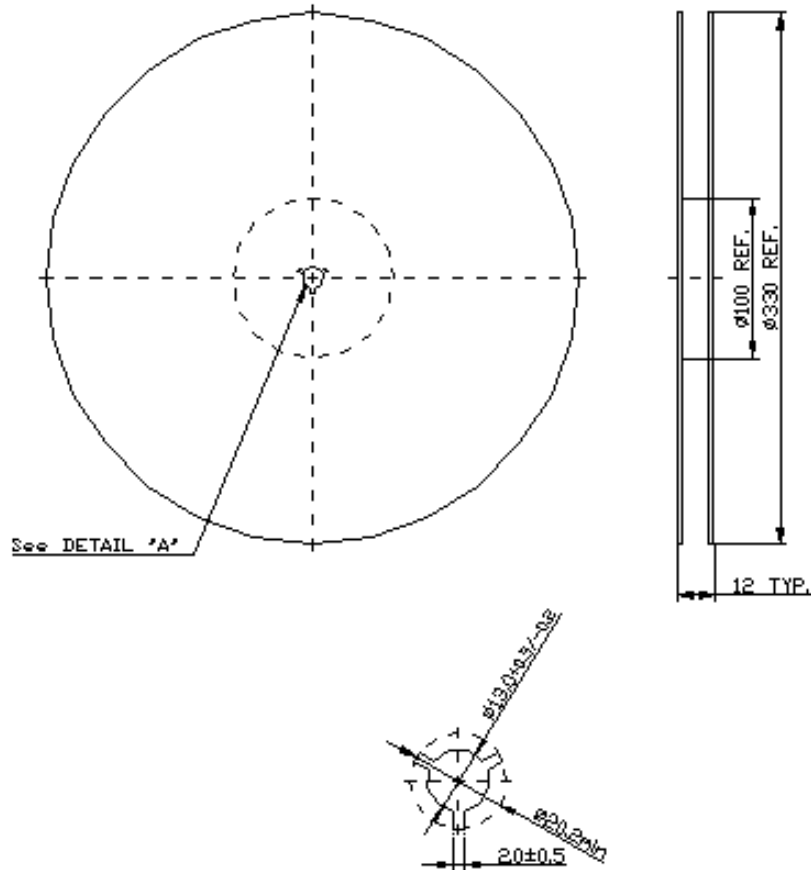


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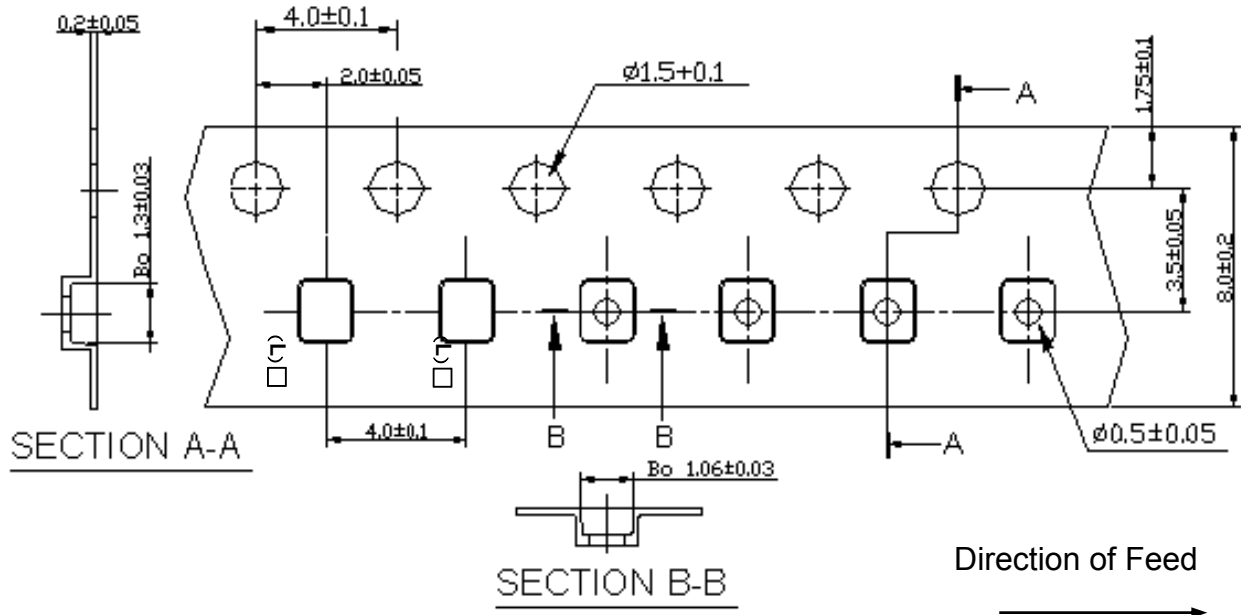
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G. PACKING:

1. Reel Dimension



2. Tape Dimension



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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.

