

SAW Filter 1842.50MHz

Model: TA1843DB

Part No: MP10147

Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Maximum Input Power: 10dBm
2. DC Voltage: 0V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature Range: -40°C to +85°C
5. Moisture Sensitive Level: Level 3 (MSL3)
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)

Item		Unit	Min.	Typ.	Max.	
Center Frequency		MHz	-	1842.5	-	
Insertion Loss (*1)	1805 ~ 1880MHz	dB	-	2.0	5.5	
Amplitude Ripple	1805 ~ 1880MHz	dB p-p	-	1.0	4.5	
VSWR	Input	1805 ~ 1880MHz	-	-	1.7	2.5
	Output	1805 ~ 1880MHz	-	-	1.6	2.5
Attenuation (Reference level from 0dB)						
DC ~ 960MHz		dB	32	35	-	
1558 ~ 1608MHz		dB	32	36	-	
1710 ~ 1785MHz		dB	34	38	-	
1920 ~ 2400MHz		dB	22	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	-	

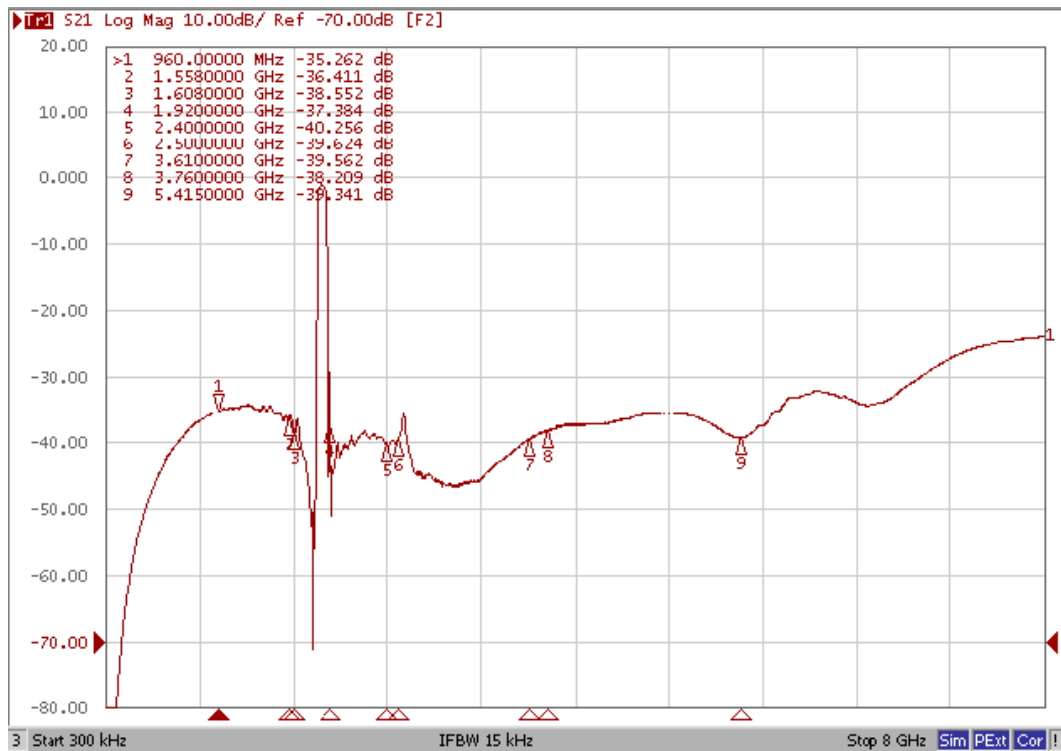
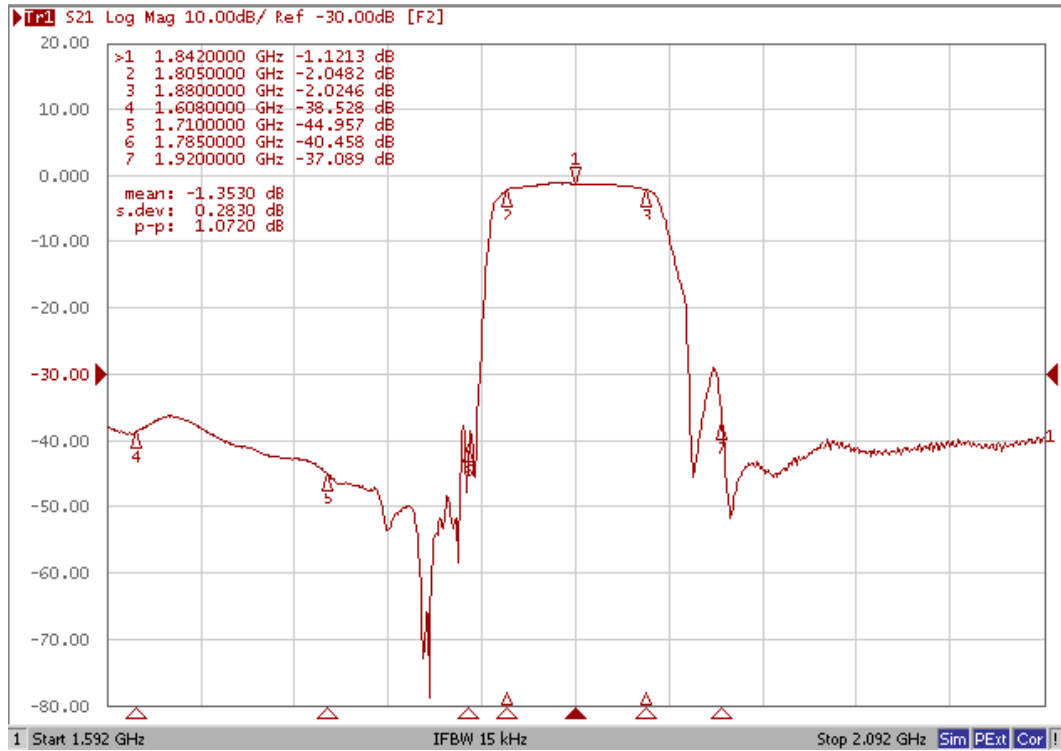
(*1). Specification of insertion loss excludes loss that comes from the test board.

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C. FREQUENCY CHARACTERISTICS:

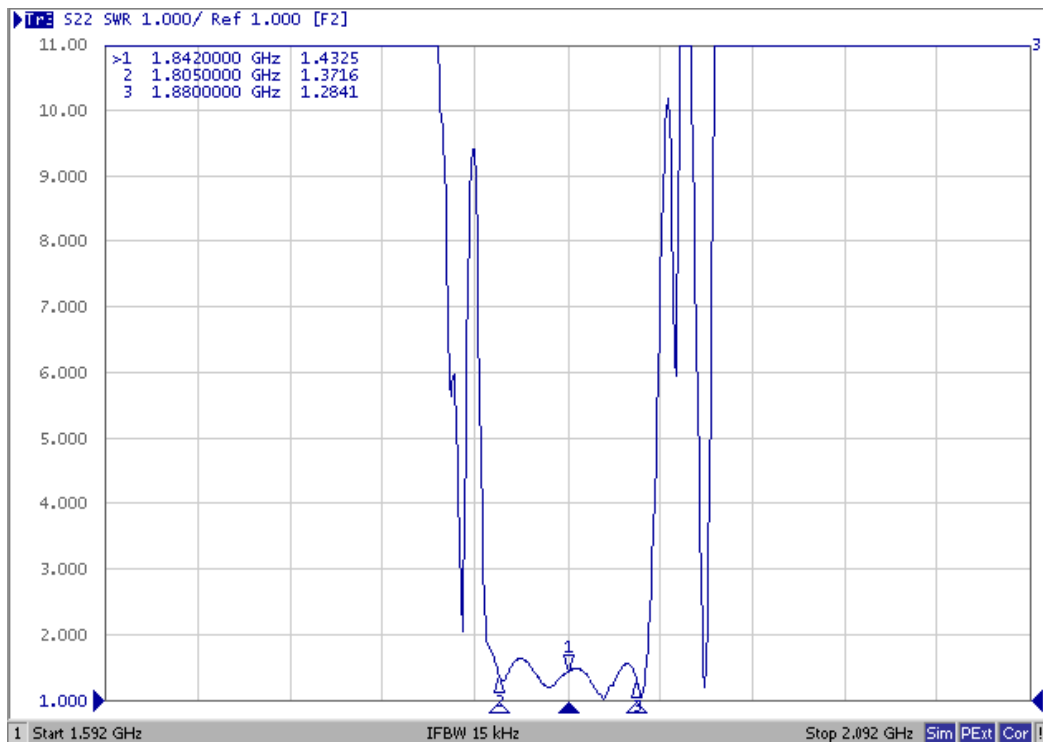
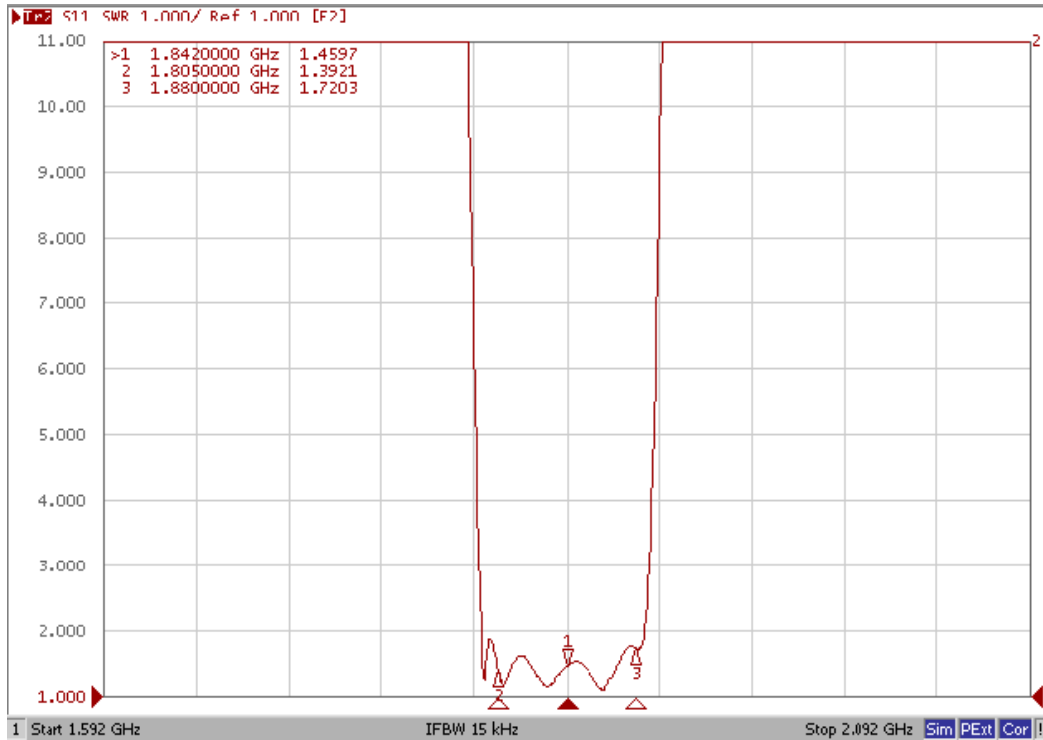
1. Frequency Response



SAW Filter 1842.50MHz
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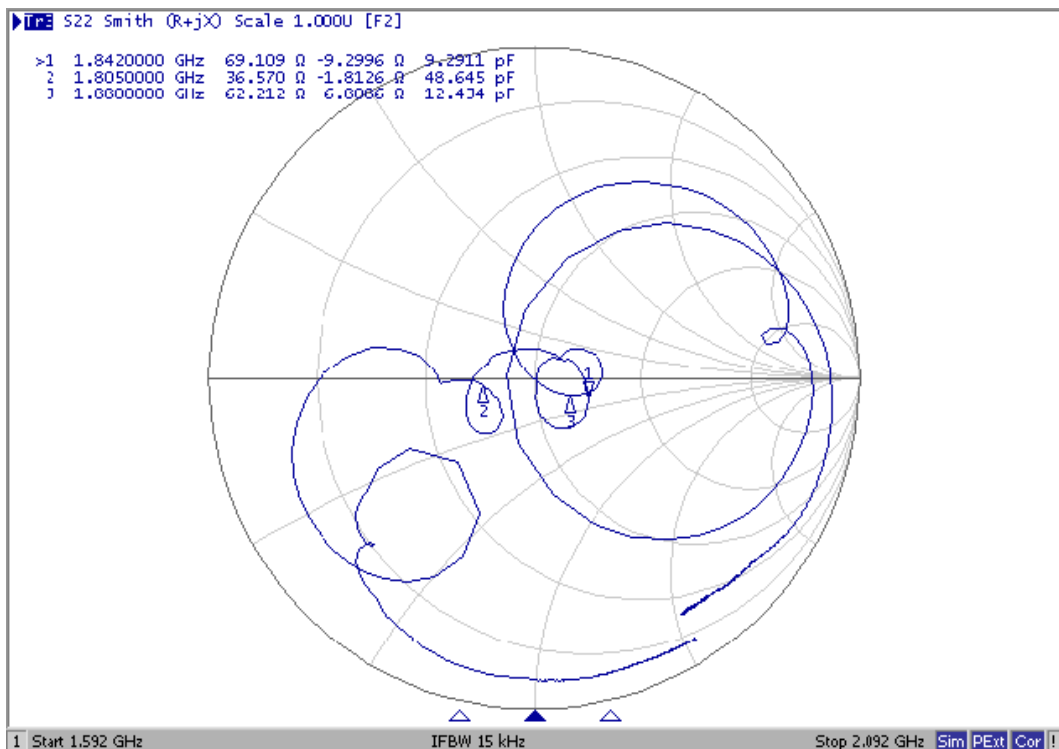
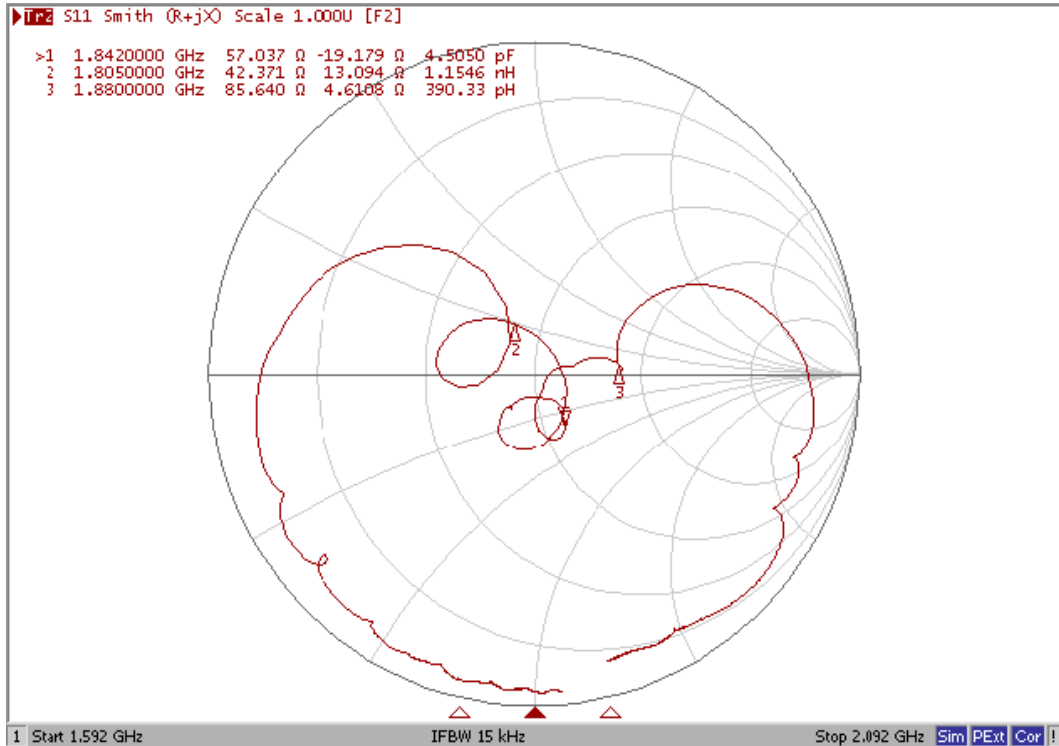
2. VSWR



SAW Filter 1842.50MHz
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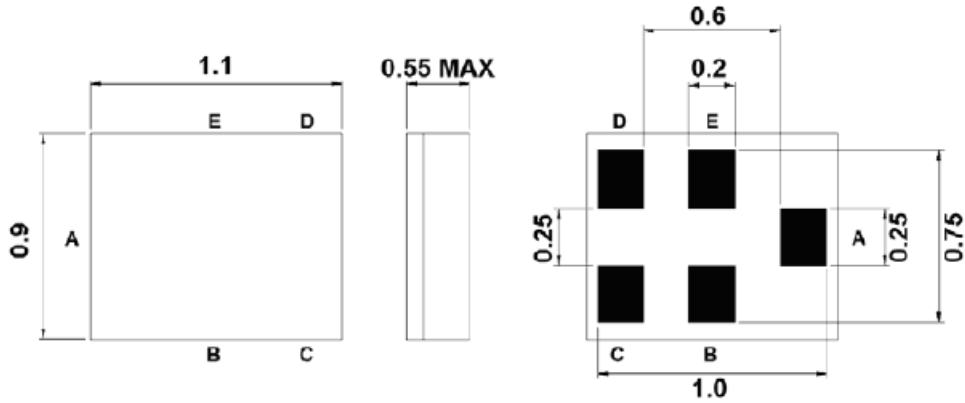
3. Smith Chart



SAW Filter 1842.50MHz
Part No: MP10147

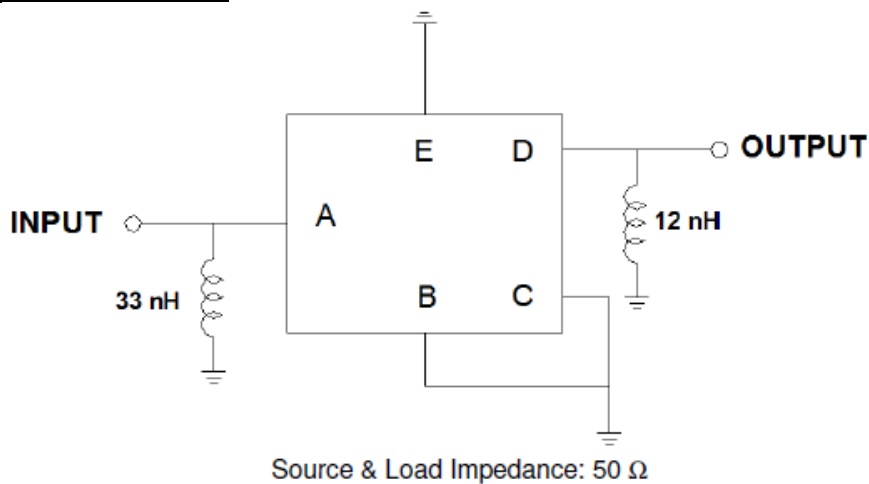
Model: TA1843DB
Rev No: 1

D. OUTLINE DRAWING:

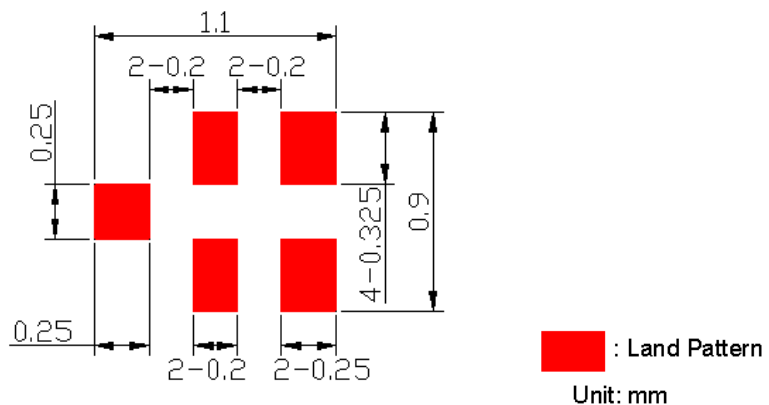


Pin Description	
B, C, E	Ground
A	Input
D	Output

E. MEASUREMENT CIRCUIT:



F. PCB FOOTPRINT:

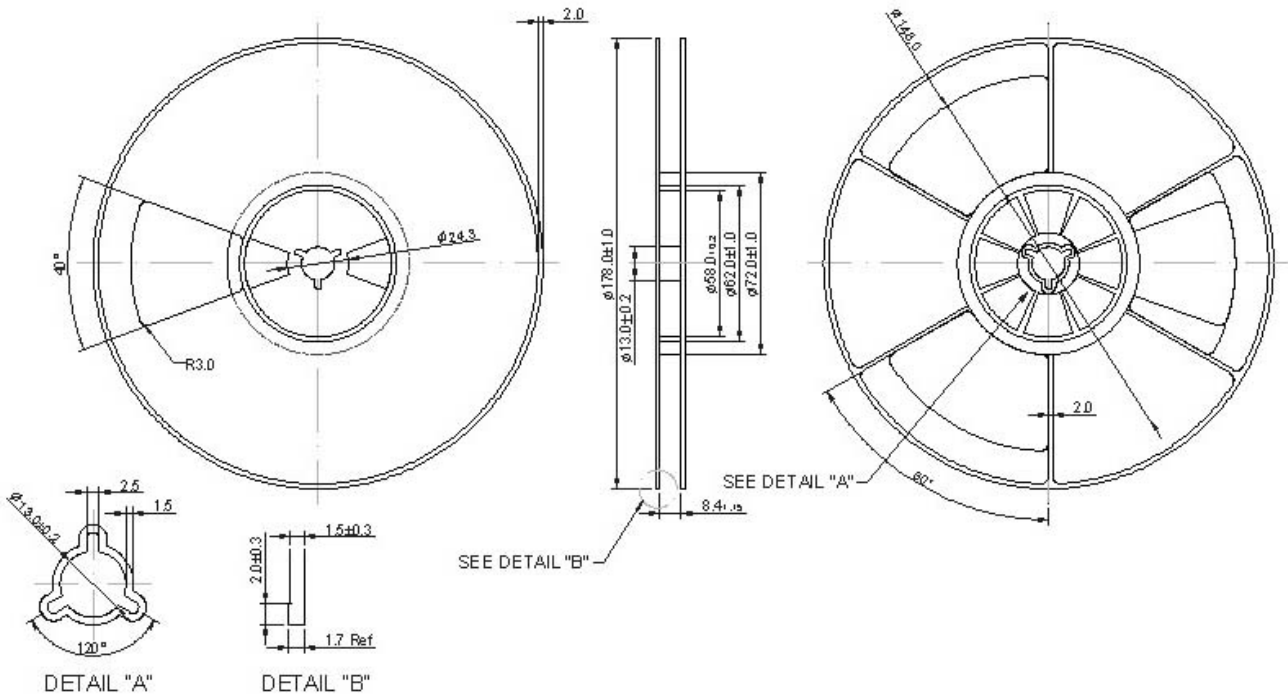


SAW Filter 1842.50MHz
Part No: MP10147

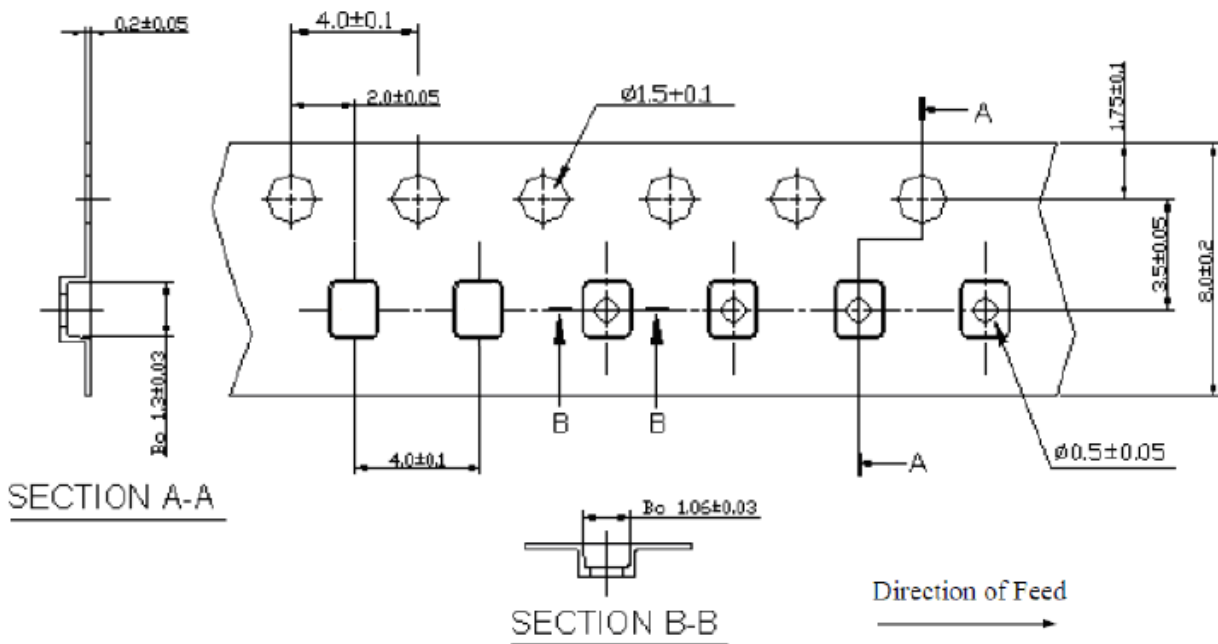
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G. PACKING:

1. Reel Dimensions



2. Tape Dimensions



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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.

