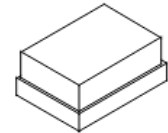


**SF2657K**

**2593 MHz  
SAW Filter**



SM1411-5

**MAXIMUM RATING:**

- Maximum Input Power: 29 dBm, 5000h 50 °C
- Maximum DC Voltage: 0 V
- Operating temperature range 1: -10 °C to +85 °C
- Operating temperature range 2: -40 °C to +85 °C
- Storage temperature range: -40 °C to +85 °C
- Moisture Sensitivity Level: Level 3(MSL3)

**ELECTRICAL CHARACTERISTICS:**

Terminating source impedance:  $Z_s = 50//1.6nH \Omega$  (Single-ended)

Terminating load impedance:  $Z_L = 50//2.0nH \Omega$  (Single-ended)

Item	Unit	Min.	Typ.	Max. 1	Max. 2
<b>Center Frequency</b> <b>Fc</b>	MHz	-	2593	-	-
<b>Insertion Loss</b> (2496 ~ 2501 MHz)	IL dB	-	3.0	4.3	6.0
<b>Insertion Loss</b> (2501 ~ 2690 MHz)	IL dB	-	2.6	3.8	4.5
<b>Insertion Loss</b> (2500 ~ 2680 MHz)	IL dB	-	2.6	3.8	4.8
<b>Insertion Loss</b> (2680 ~ 2690 MHz)	IL dB	-	2.6	3.5	3.5
<b>Insertion Loss</b> (2555 ~ 2655 MHz)	IL dB	-	1.8	2.8	2.8
<b>Insertion Loss</b> (2545 ~ 2575 MHz)	IL dB	-	1.4	2.5	2.5
<b>Insertion Loss</b> (2620 ~ 2690 MHz)	IL dB	-	2.6	3.3	3.3
<b>Amplitude Ripple</b> (2496 ~ 2501 MHz)	dB <sub>p-p</sub>	-	0.7	2.6	3.6
<b>Amplitude Ripple</b> (2501 ~ 2690 MHz)	dB <sub>p-p</sub>	-	1.3	2.4	3.0
<b>VSWR</b> (2496 ~ 2501 MHz)	-	-	1.4	2.0	2.0
<b>VSWR</b> (2501 ~ 2690 MHz)	-	-	1.6	2.0	2.0
<b>Attenuation</b> (reference level from 0 dB)					
DC ~ 916 MHz	dB	40	46	-	-
925 ~ 960 MHz	dB	37	44	-	-
1226.57 ~ 1228.63 MHz	dB	27	37	-	-
1242.42 ~ 1249.14 MHz	dB	27	36	-	-

1248 ~ 1564 MHz	dB	22	28	-
1559 ~ 1605.89 MHz	dB	22	28	-
1615 ~ 2400 MHz	dB	12	16	-
1710 ~ 1785 MHz	dB	17	23	-
1805 ~ 1850 MHz	dB	17	21	-
1880 ~ 1920 MHz	dB	17	20	-
1920 ~ 1980 MHz	dB	13	18	-
2110 ~ 2170 MHz	dB	10	14	-
2401 ~ 2468 MHz	dB	20	35	-
2451 ~ 2473 MHz	dB	7	25	-
2456 ~ 2478 MHz	dB	4	11	-
2461 ~ 2483 MHz	dB	3	6.7	-
2775 ~ 4992 MHz	dB	15	19	-
4992 ~ 5380 MHz	dB	25	33	-
5381 ~ 7487 MHz	dB	25	37	-
7488 ~ 8070 MHz	dB	25	38	-



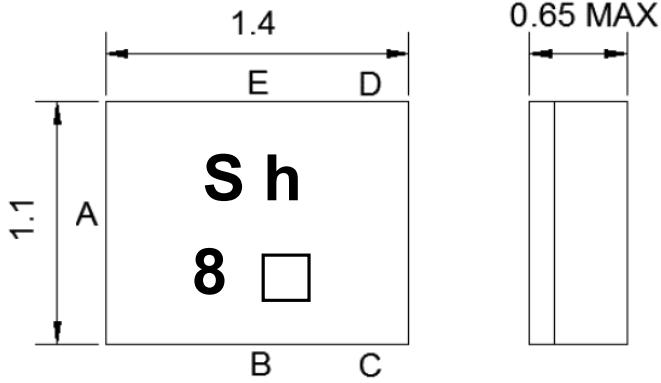
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**NOTES:**

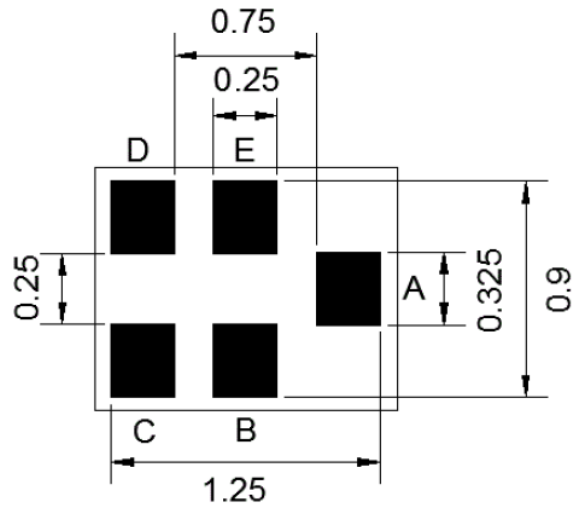
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. This component was always RoHS compliant from the first date of manufacture.

**OUTLINE DRAWING:**

**top view**



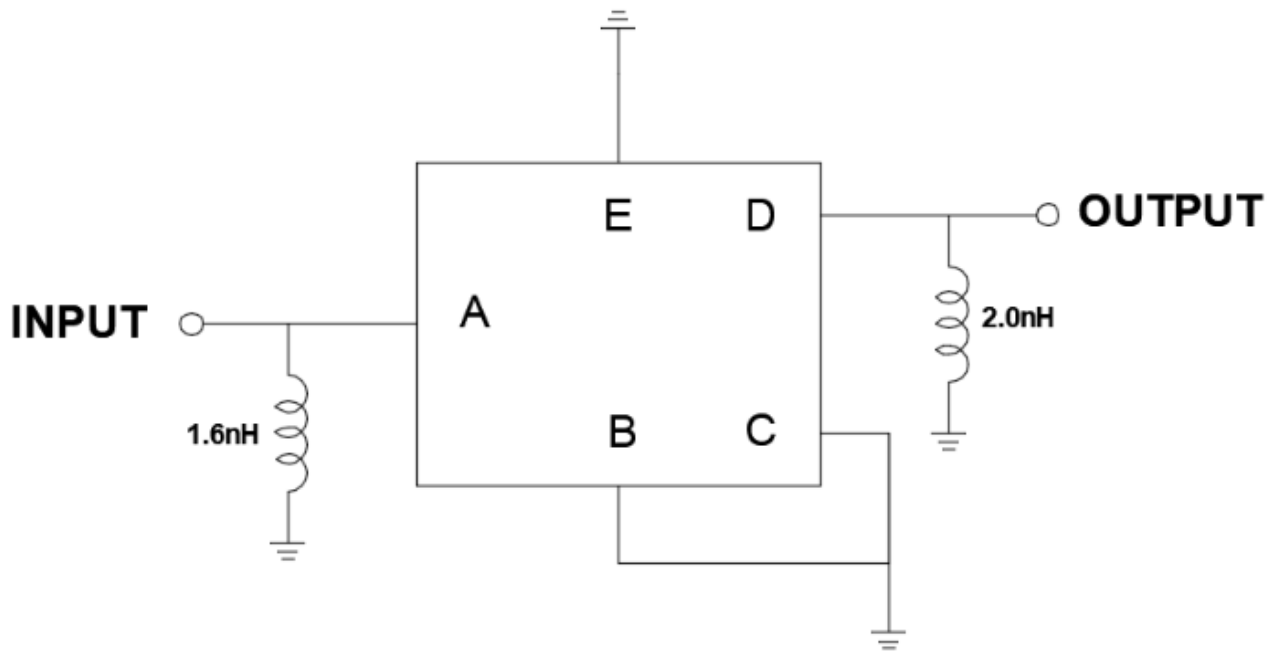
**bottom view**



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

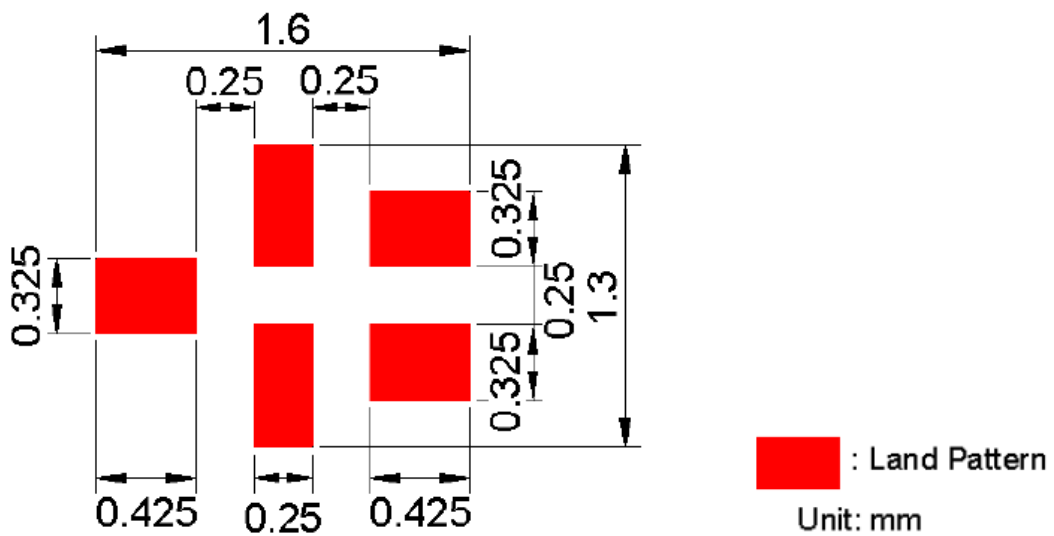
Marking Descriptions	
□	Date Code(Year+Month)

**MEASUREMENT CIRCUIT:**

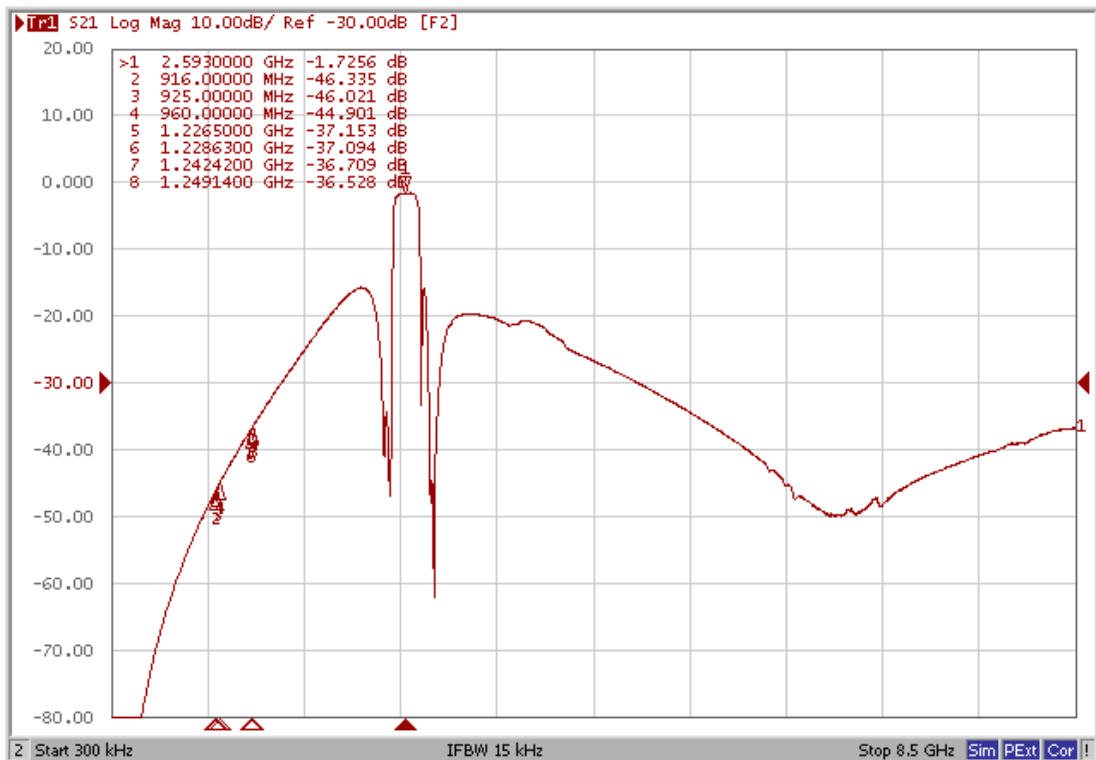
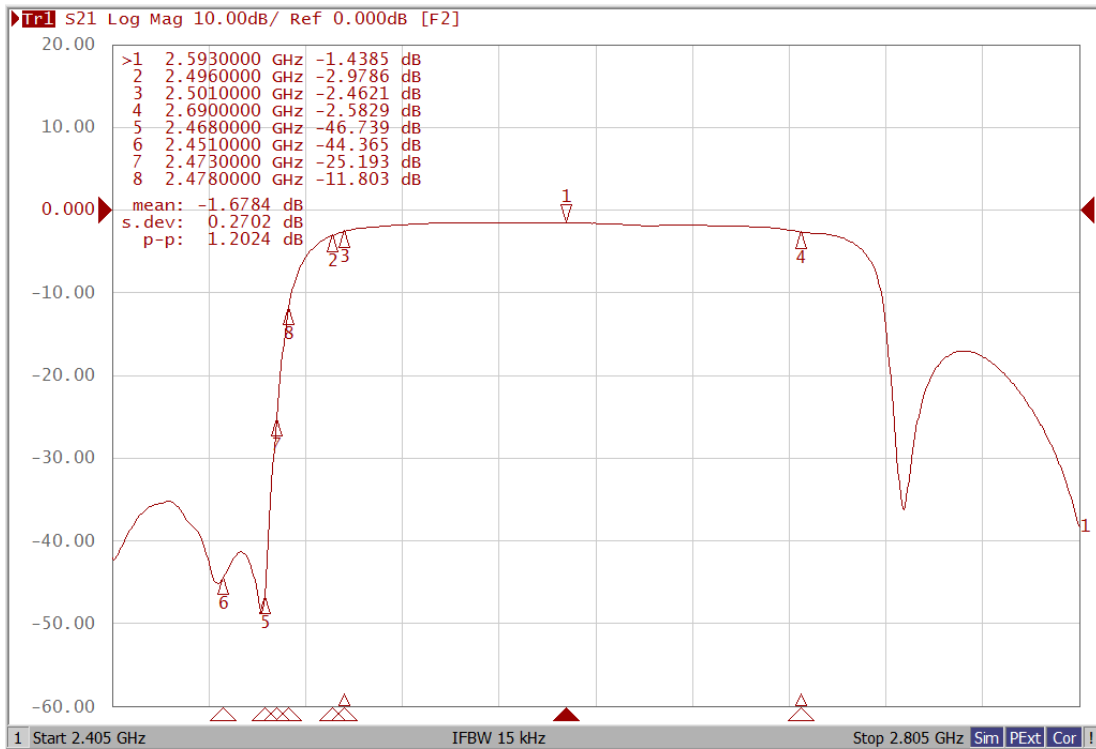


Source & Load Impedance: 50 Ω

**PCB Footprint :**

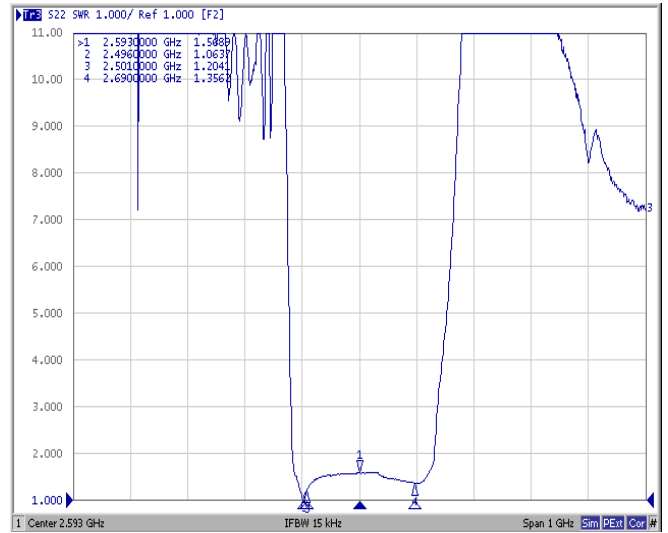
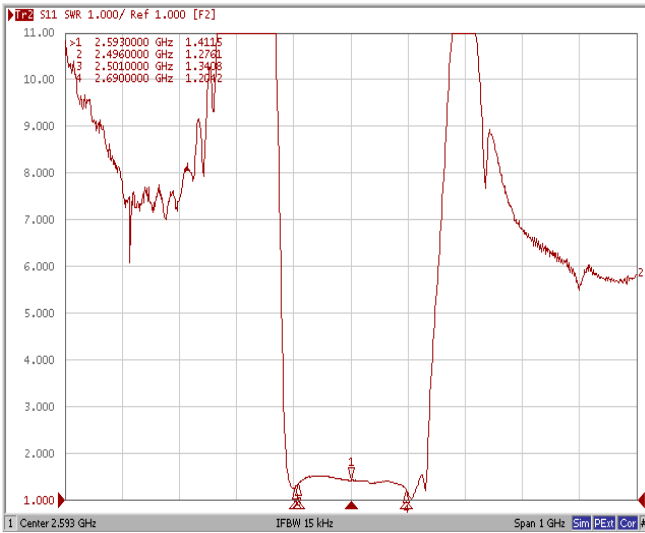


## Frequency Characteristics:

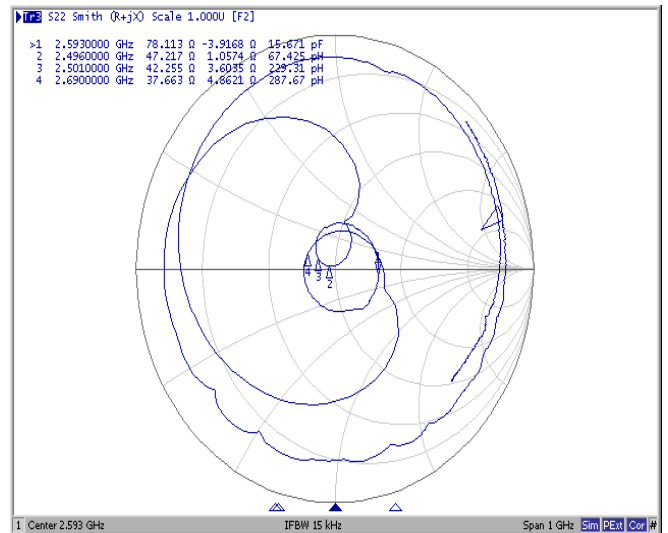
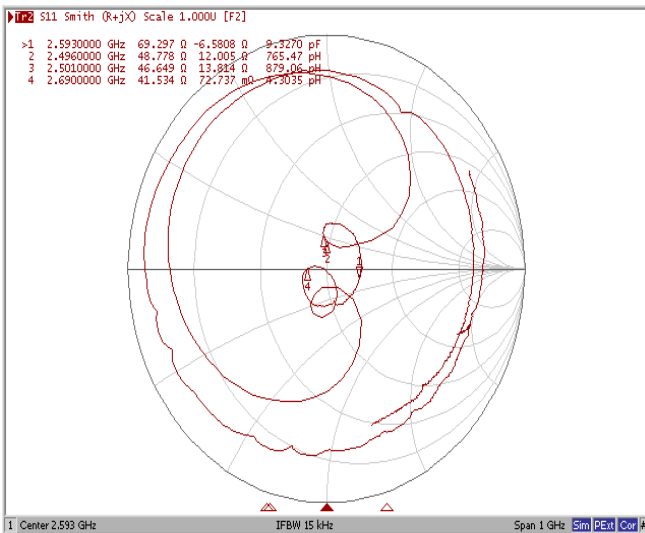


# Reflection Functions:

## VSWR

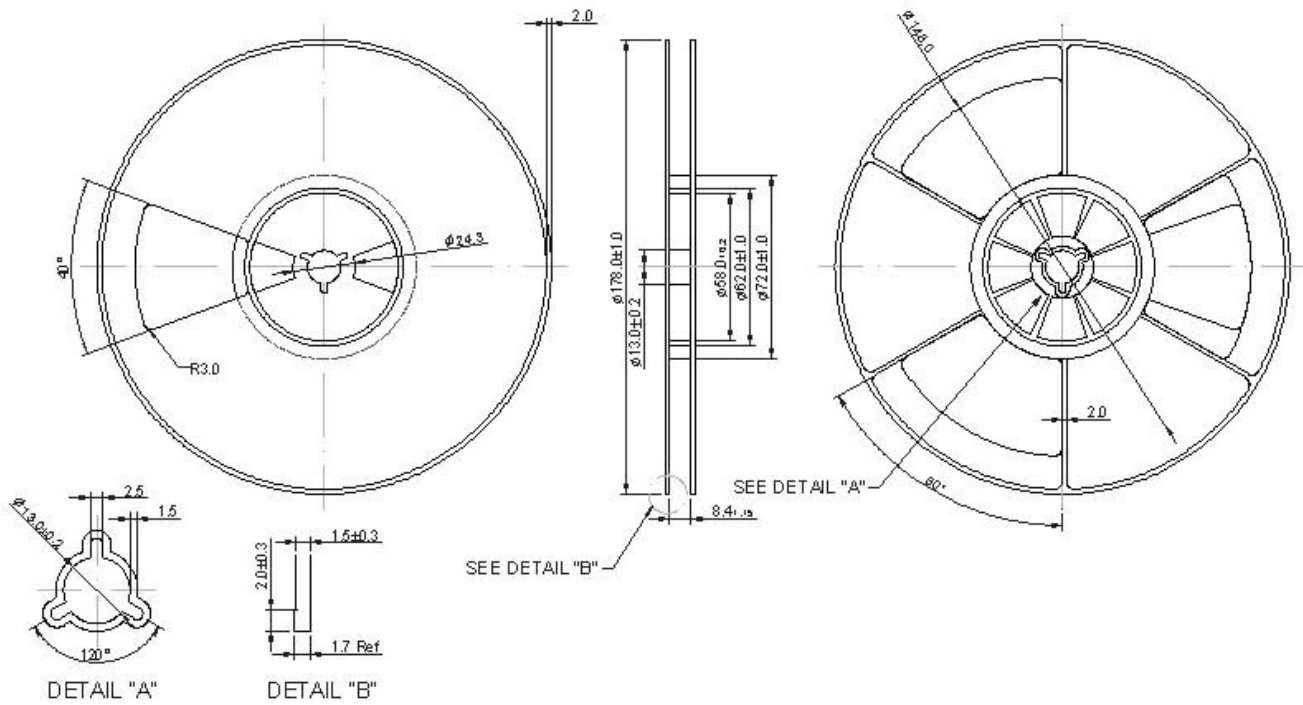


## Smith Chart

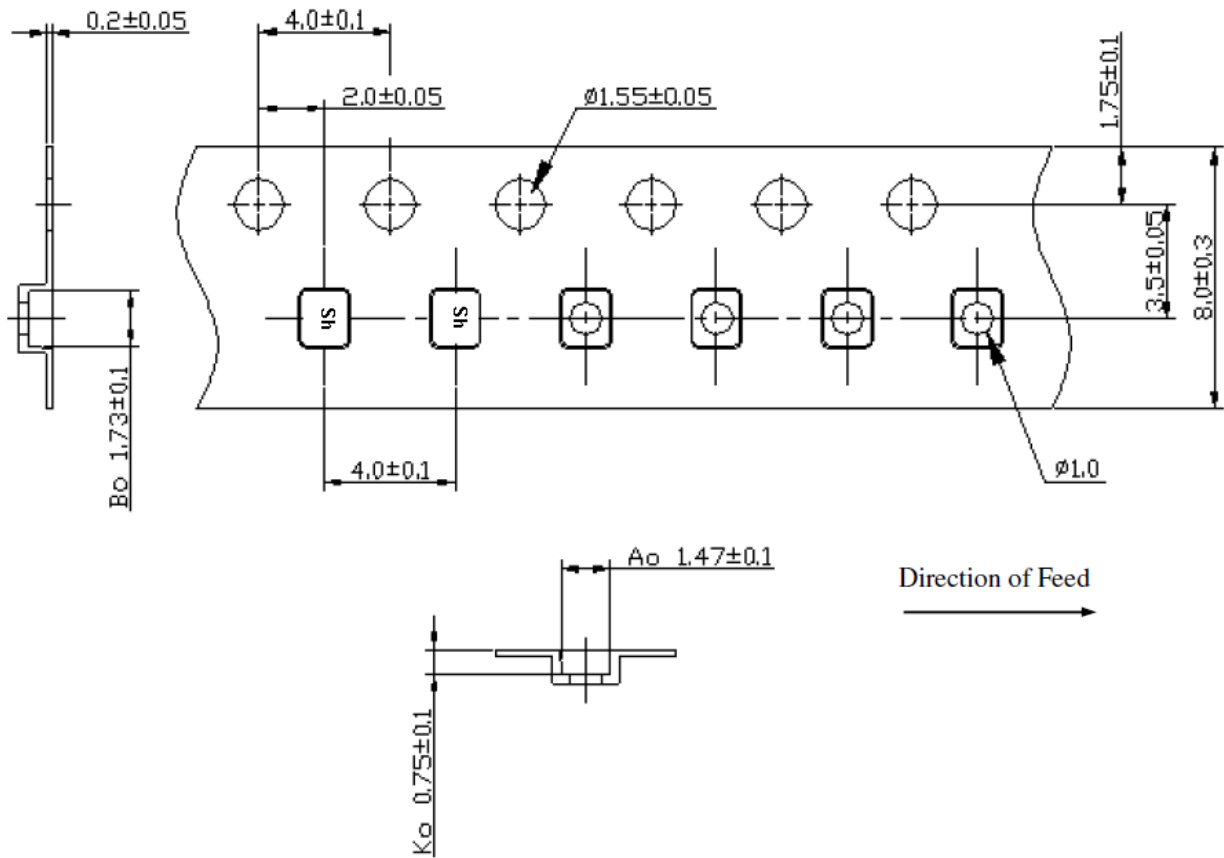


**PACKING:**

**1. REEL DIMENSION  
(Reel Count: 7" = 3000)**



**2. TAPE DIMENSION**



### 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 245~260°C peak (min. 10sec).
4. Time: 2 times.

