

BF2007L

**2593 MHz
BAW Filter**



SM1109-5

Maximum Rating:

- ▽ Input Power Level : 31.5dBm
- ▽ DC Voltage : 5V
- ▽ Operating Temperature: -40°C to +85°C
- ▽ Storage Temperature: -40°C to +125°C
- ▽ Moisture Sensitivity Level: Level 3

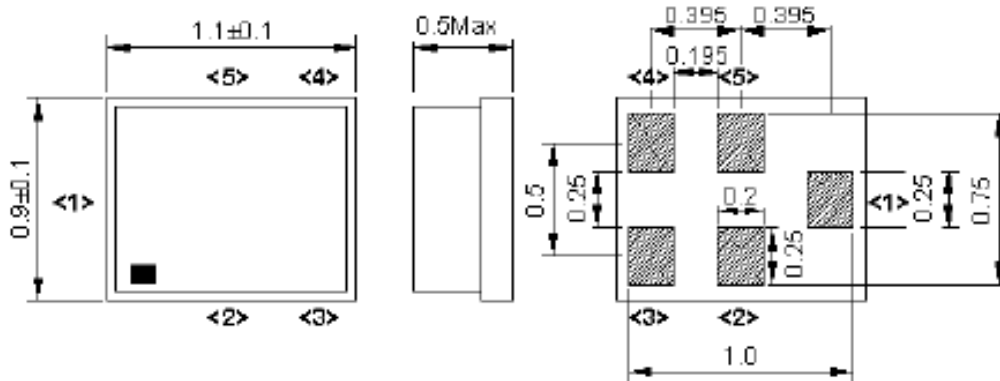
Electrical Characteristics:

Item	Unit	Min.	Typ.	Max.	Note	
Center Frequency	MHz	-	2593			
Insertion Loss	2496~2500 MHz	dB	-	2.6	3.0	
	2500~2690 MHz	dB	-	1.6	2.9	
	2535~2675 MHz	dB	-	1.5	2.2	
	2555~2655 MHz	dB	-	1.6	2.2	
Amplitude Ripple	2496 ~ 2690 MHz	dB	-		1.8	
VSWR(Input)	2496 ~ 2690 MHz	-	-	1.9	2.2	
VSWR(Output)	2496 ~ 2690 MHz	-	-	1.8	2.1	
Attenuation (reference level from 0 dB)						
300 ~ 925 MHz	dB	38	52	-		
1565 ~ 1980 MHz	dB	32	34	-		
2110 ~ 2170 MHz	dB	32	34	-		
2200 ~ 2300 MHz	dB	34	38	-		
2300 ~ 2400 MHz	dB	34	43	-		
2402 ~ 2422 MHz	dB	33	36	-	WiFi Channel 1	

2407 ~ 2427 MHz	dB	40	44	-	WiFi Channel 2
2412 ~ 2432 MHz	dB	30	38	-	WiFi Channel 3
2417 ~ 2447 MHz	dB	45	51	-	WiFi Channel 4-6
2432 ~ 2452 MHz	dB	47	58	-	WiFi Channel 7-8
2442 ~ 2462 MHz	dB	27	46	-	WiFi Channel 9
2447 ~ 2467 MHz	dB	10	19	-	WiFi Channel 10
2452 ~ 2472 MHz	dB	20	35	-	WiFi Channel 11
2457 ~ 2477 MHz	dB	26	39	-	WiFi Channel 12
2462 ~ 2482 MHz	dB	30	44	-	WiFi Channel 13
2775 ~ 2850 MHz	dB	42	51	-	
3300 ~ 4200 MHz	dB	43	49	-	
4400 ~ 5380 MHz	dB	39	44	-	
7487 ~ 8000 MHz	dB	34	40	-	

Note: The typical value is average value of each frequency band at 25°C

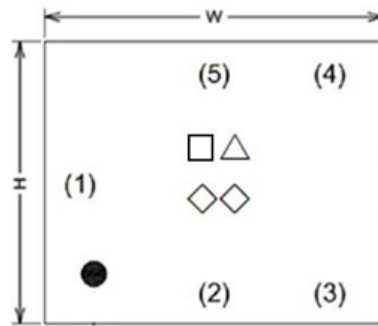
Outline Drawing



Pin Configuration		
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

Not specified tolerance: ± 0.1 mm
Unit:mm

Top View (Mass Production)



<Top View>

Marking name : P or E

△ : Date Code. Follow below table. (4-year cycle)

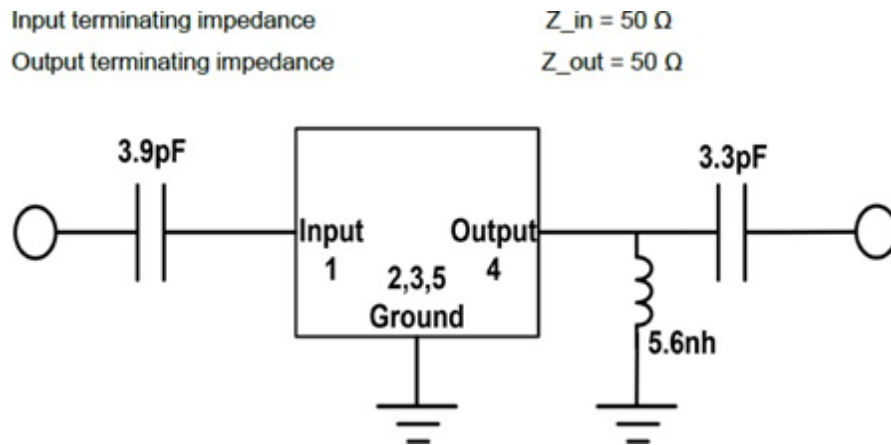
□ □ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
2020/2024	A	B	C	D	E	F	G	H	J	K	L	M
2021/2025	N	P	Q	R	S	T	U	V	W	X	Y	Z
2022/2026	a	b	c	d	e	f	g	h	i	j	k	m
2023/2027	n	p	q	r	s	t	u	v	w	x	y	z

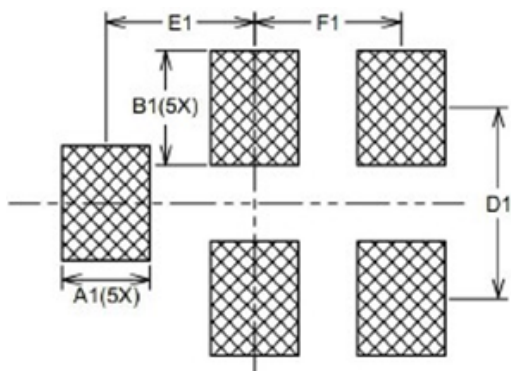
Week & Lot Code Table

001	002	003	004	005	006	007	008	009	010	011	012
A	B	C	D	E	F	G	H	J	K	L	M
013	014	015	016	017	018	019	020	021	022	023	024
N	P	Q	R	S	T	U	V	W	X	Y	Z
025	026	027	028	029	030	031	032	033	034	035	036
a	b	c	d	e	f	g	h	i	j	k	m
037	038	039	040	041	042	043	044	045	046	047	048
n	p	q	r	s	t	u	v	w	x	y	z

Real Circuit



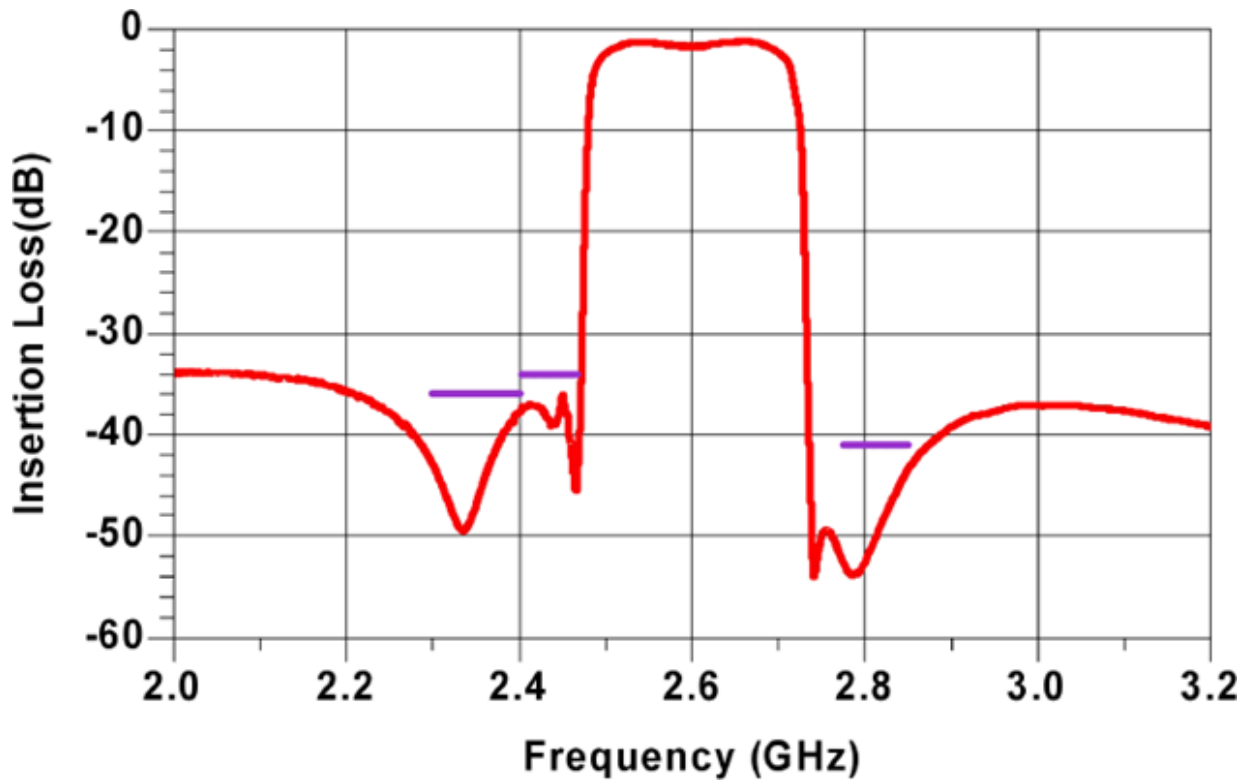
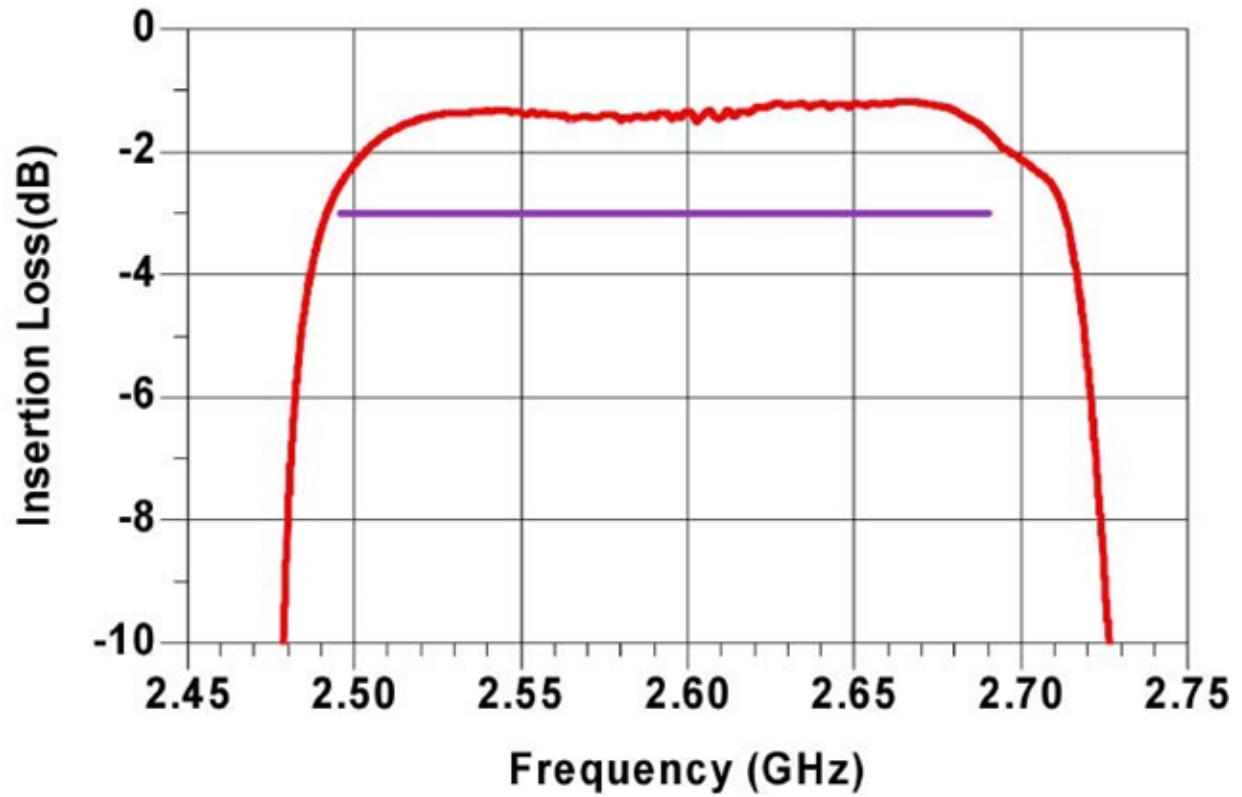
PCB Footprint



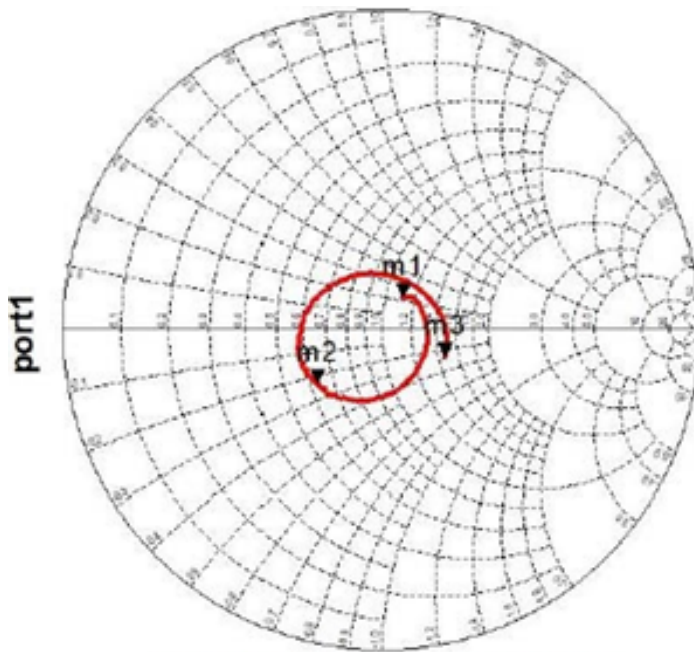
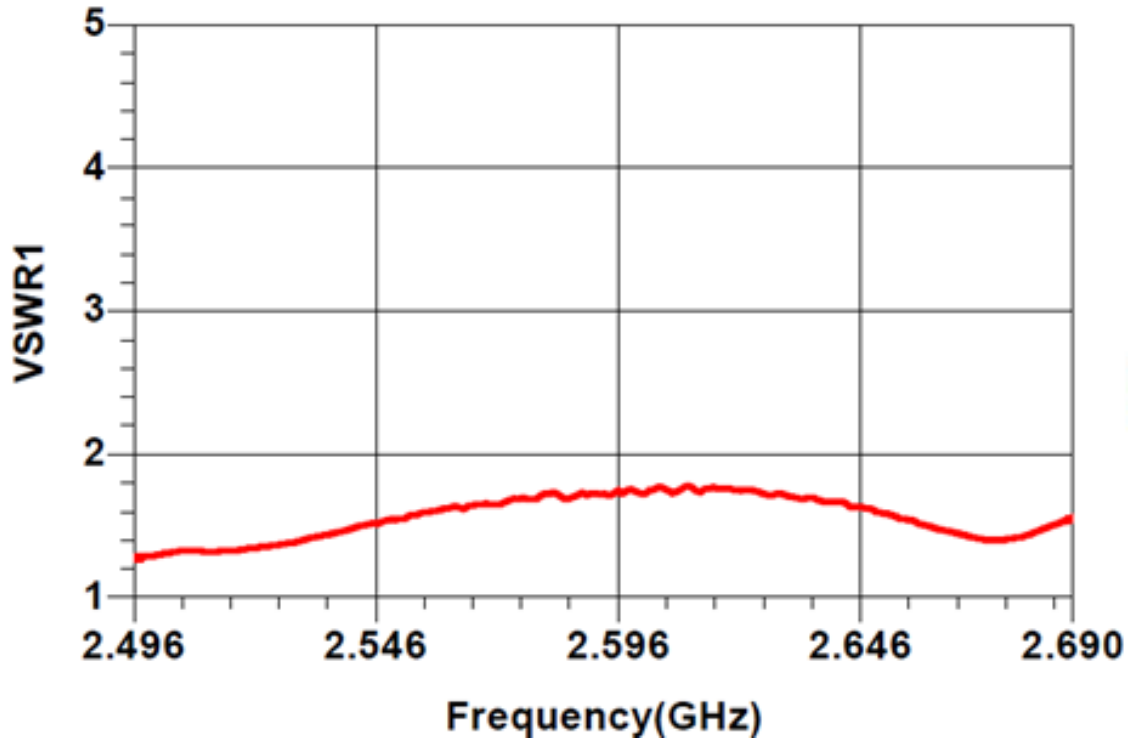
Symbol	DIMENSION REQUIREMENT	
A1	0.23	Land pattern THRU VIEW
B1	0.3	
D1	0.5	
E1	0.385	
F1	0.385	

Frequency Characteristics

Passband



Input Port



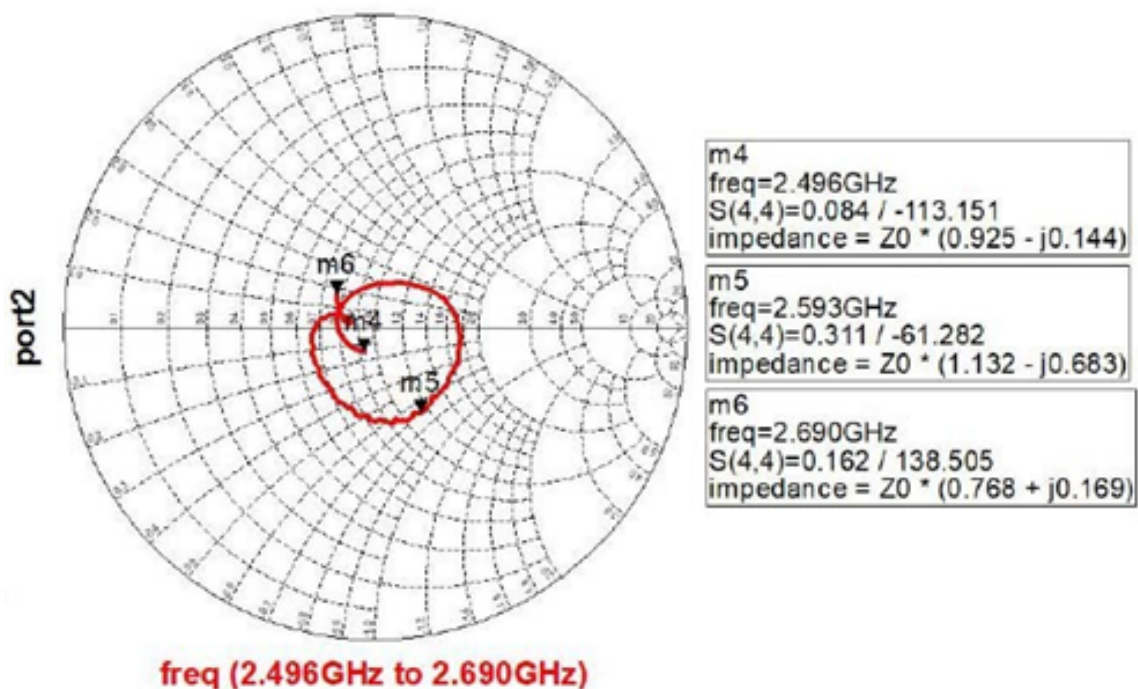
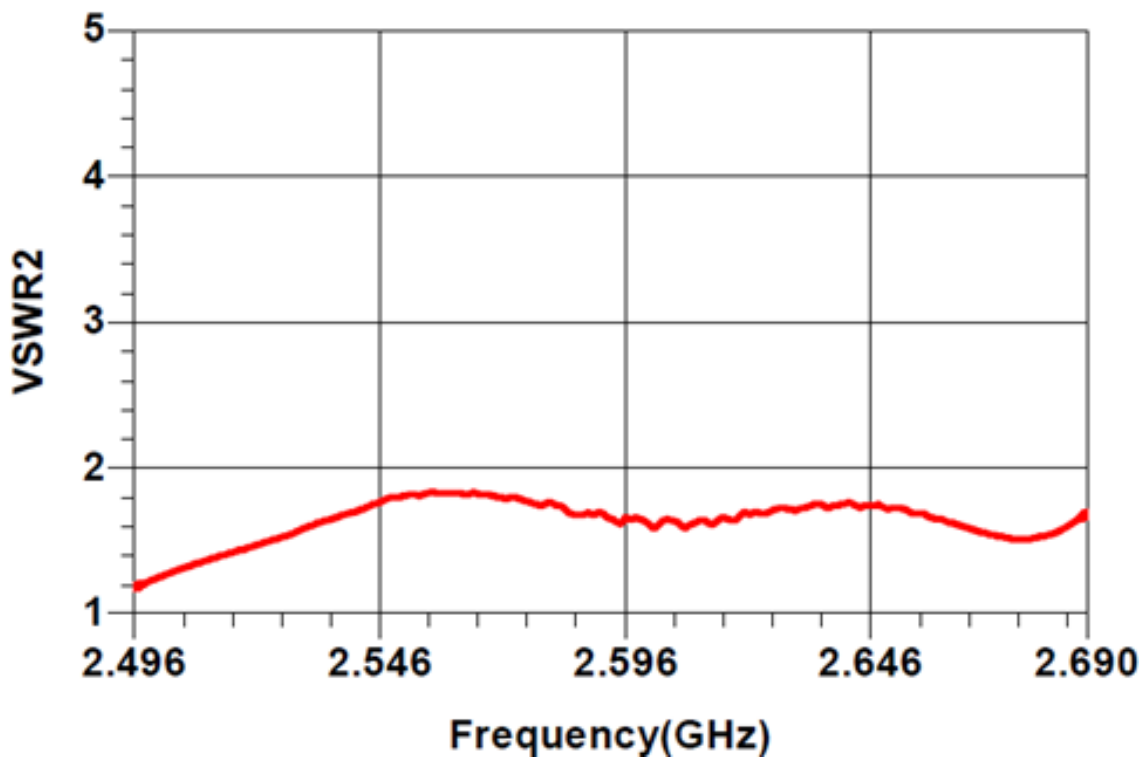
m1
freq=2.496GHz
S(1,1)=0.120 / 57.041
impedance = $Z_0 * (1.115 + j0.227)$

m2
freq=2.593GHz
S(1,1)=0.264 / -140.393
impedance = $Z_0 * (0.630 - j0.228)$

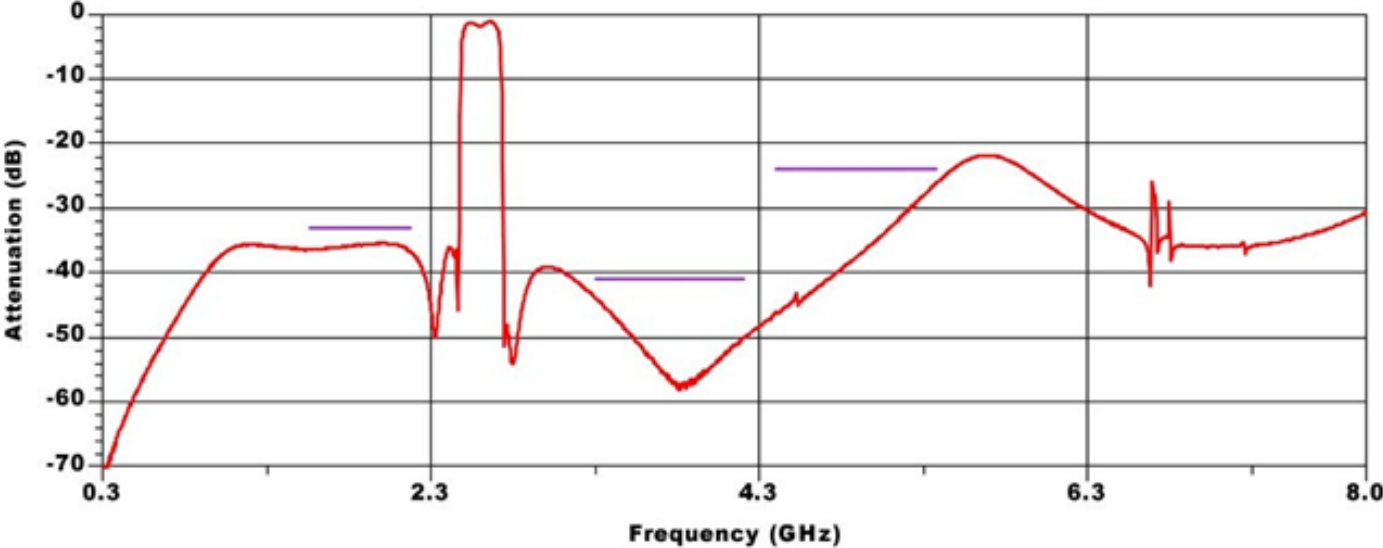
m3
freq=2.690GHz
S(1,1)=0.216 / -23.778
impedance = $Z_0 * (1.463 - j0.267)$

freq (2.496GHz to 2.690GHz)

Output Port



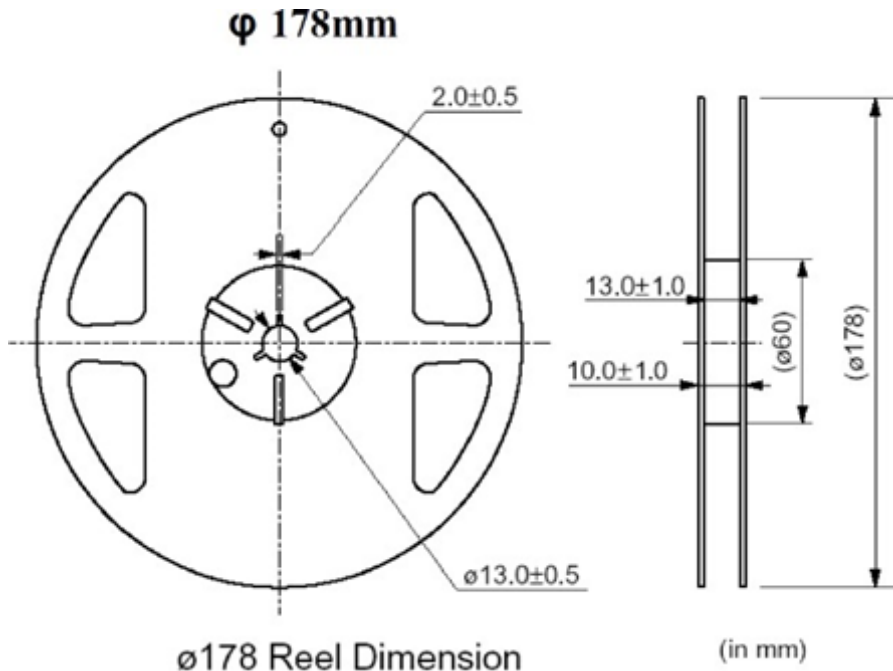
Wide span



Packing:

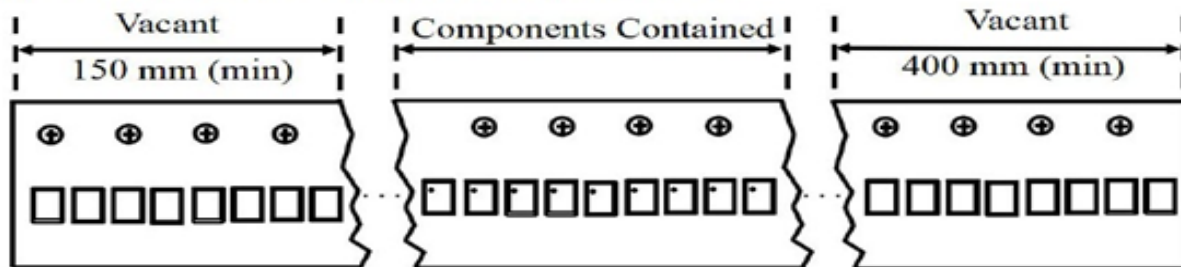
Reel Dimension

Reel Count:
7" = 3000

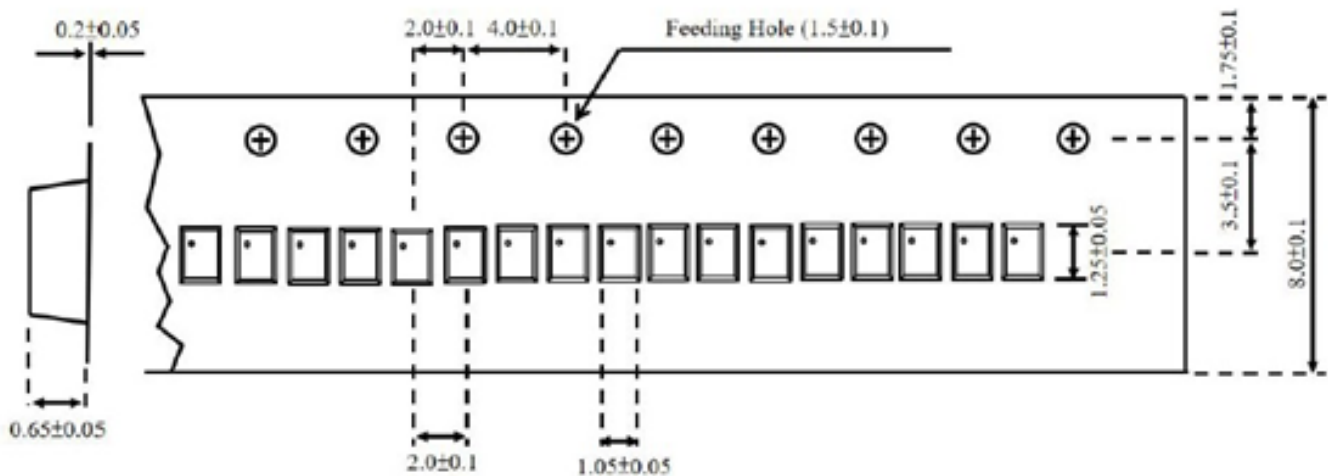


$\phi 178$ Reel Dimension

(1). Leader part and vacant position specifications



(2). Tape Specifications



H. Recommended Solder 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.

