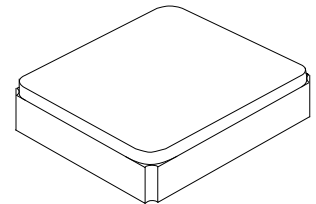


**SF2766QM**

**2000 / 2185 MHz  
SAW Duplexer**



**SM1612-8**

**Maximum Rating:**

- Input Power Level: 31dBm (Ta=+50deg C, 5000h)
- DC Voltage : +/-5 V
- Operating Temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Moisture Sensitivity Level: Level 1 (**MSL 1**)
- ESD 50V(MM) 100V(HBM)
- AEC-Q200 Compliant
- **Band n256**

**Electrical Characteristics:**

**Tx to Ant**

Item		Unit	Min	Typ	Max	Remarks
Center frequency		MHz		2000		
Insertion Loss		1980 - 2010 MHz	dB	1.0	1.5	
Amplitude Ripple		1980 - 2010 MHz	dB	0.3	1.2	
VSWR	Tx	1980 - 2010 MHz		1.4	2.0	
	Ant	1980 - 2010 MHz		1.4	2.0	
Attenuation	617 - 960 MHz		dB	41	46	
	1574 - 1577 MHz		dB	31	36	
	1598 - 1606 MHz		dB	31	36	
	1805 - 1880 MHz		dB	33	39	
	2110 - 2170 MHz		dB	44	50	
	2170 - 2200 MHz		dB	44	48	
	2300 - 2690 MHz		dB	32	36	
	3300 - 4200 MHz		dB	32	38	
	3960 - 4020 MHz		dB	35	41	
	4400 - 5000 MHz		dB	20	28	
	5940 - 6030 MHz		dB	10	15	
	7920 - 8040 MHz		dB	2	7	
	9900 - 10050 MHz		dB	4	9	
11880 - 12060 MHz		dB	13	18		

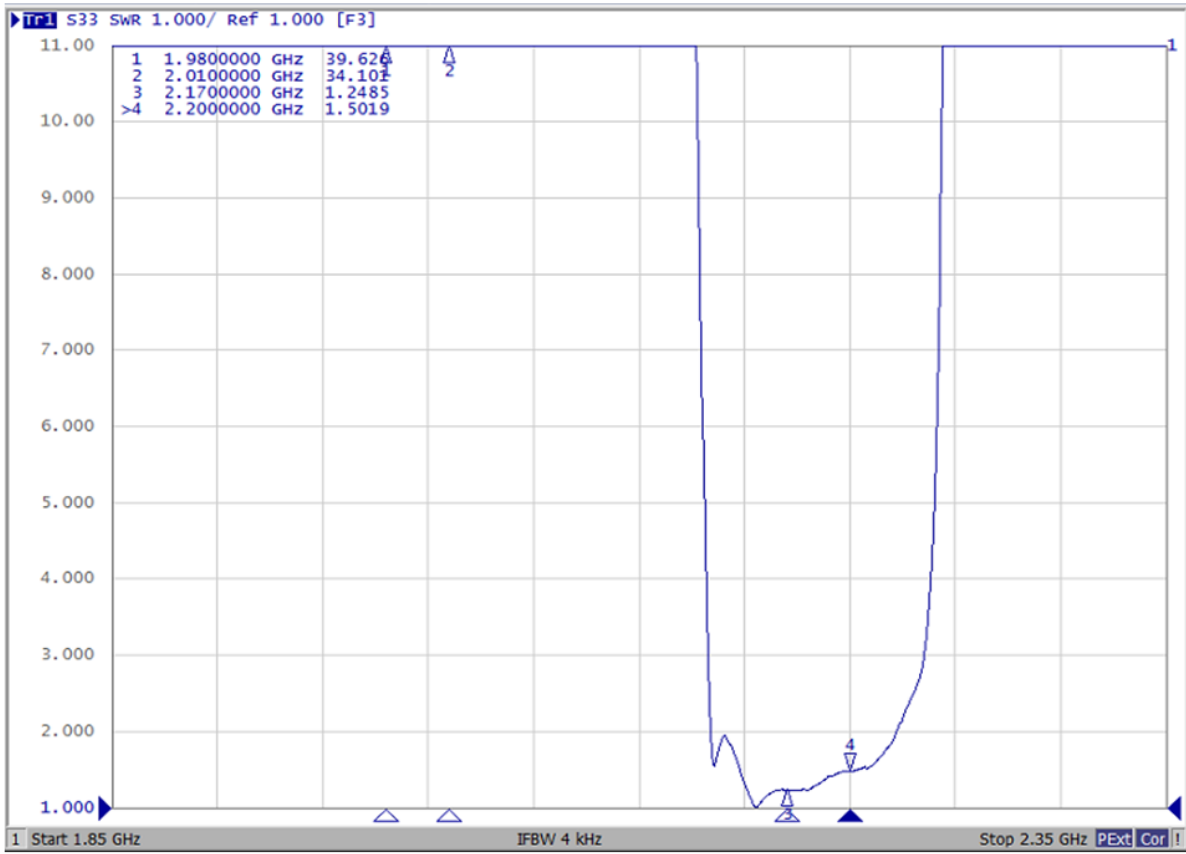




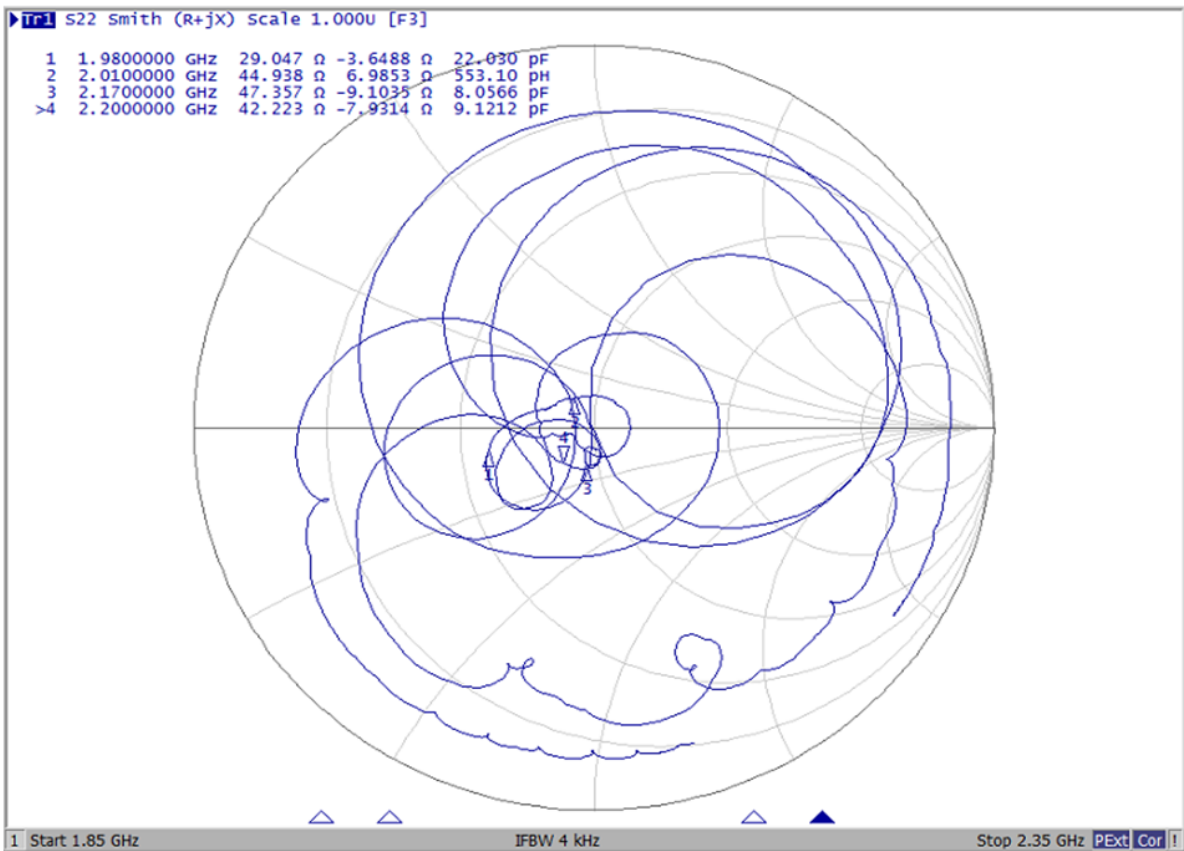
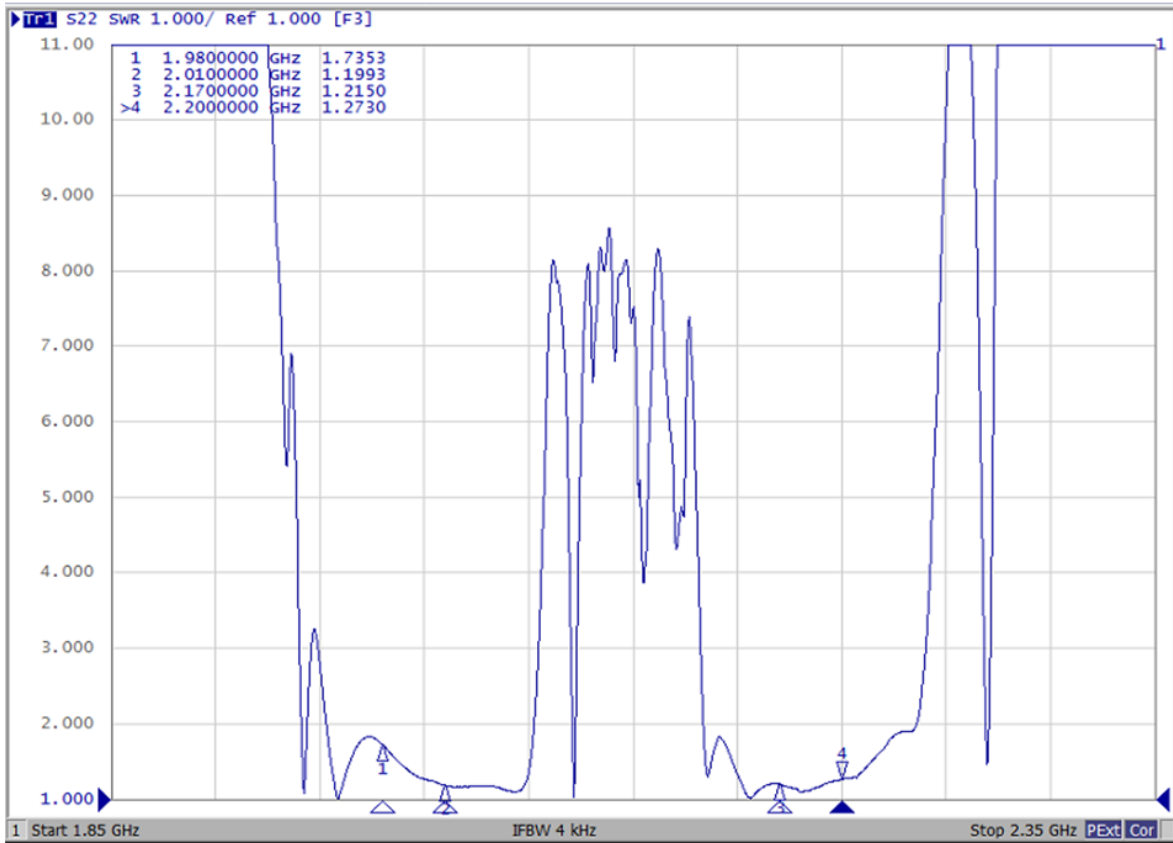




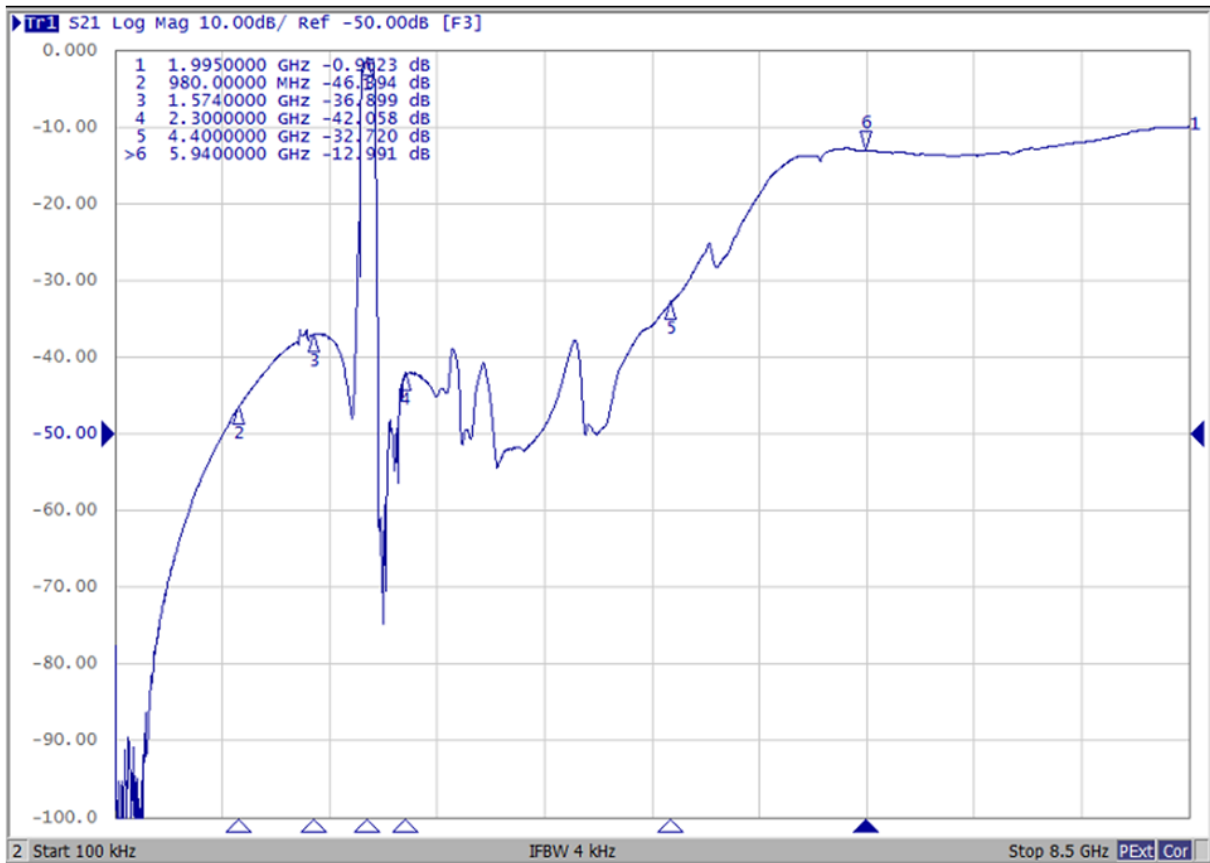
# Rx Port



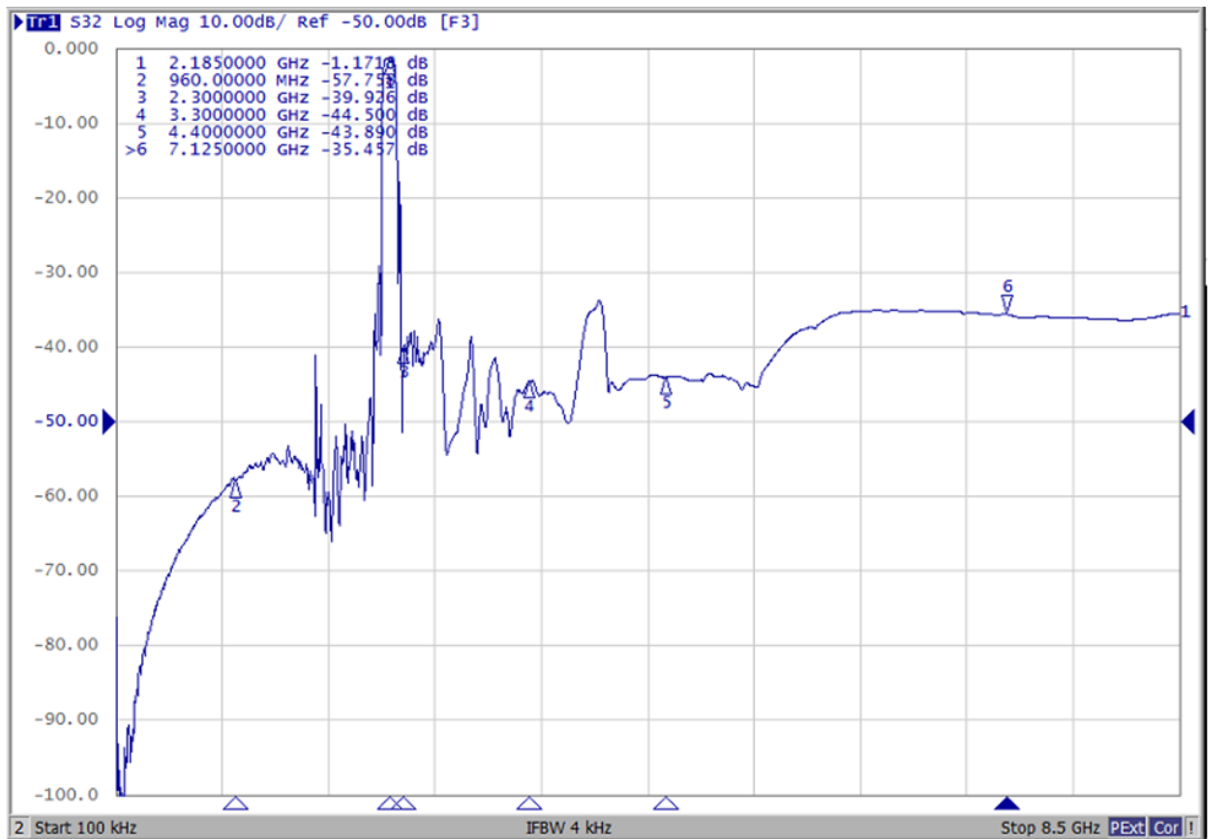
# Ant Port



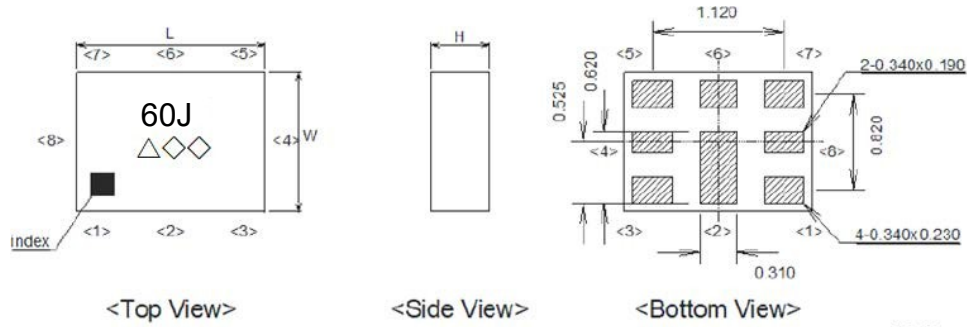
## Tx to Ant (Wide Span)



## Ant to Rx (Wide Span)



# Package Drawing and Pin Description



Unit : mm  
1 to 8 : Pin No.

Marking name: 60J(Part Symbol)

△: Trace Code.(2020 May → s,....., 2023 Dec → m)

◇◇: Lot Code.

Product Trace Code.Follow below table.(4-year cycle)

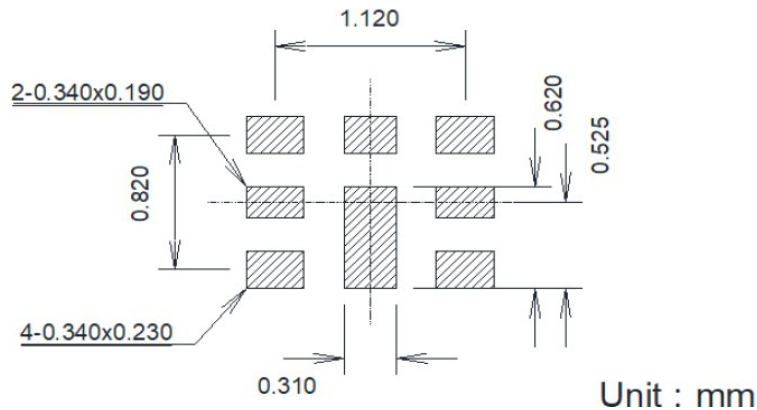
L = 1.6 +/- 0.1 mm

W = 1.2 +/- 0.1 mm

H = 0.44 mm Max

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

## PCB Mounting Pattern



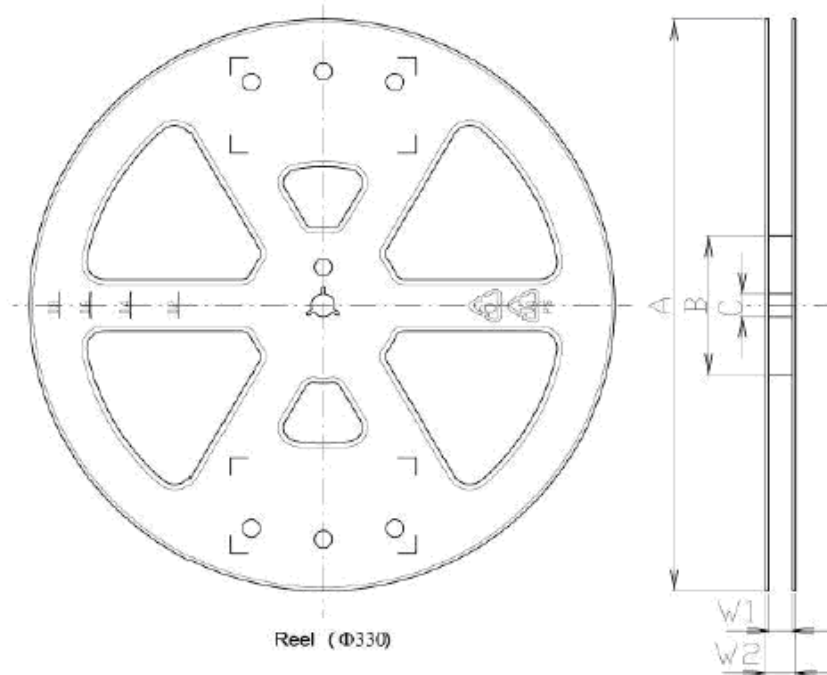
Unit : mm

Pin No.	Symbol	Function
1	Rx	Receiver
2	GND	Ground
3	Tx	Transmitter
4	GND	Ground
5	GND	Ground
6	Ant	Antenna
7	GND	Ground
8	GND	Ground

### Notes:

- All units are in mm unless otherwise stated
- General Tolerance
  - Linear: X.XXX = ±0.050mm
  - X.XX = ±0.10mm
- Terminations
  - Au: 0.10 um min.
  - Pd: 0.10 um min.
  - Ni: 2-5 um
- Pin 1 indicated by 0.100 mm Chamfer

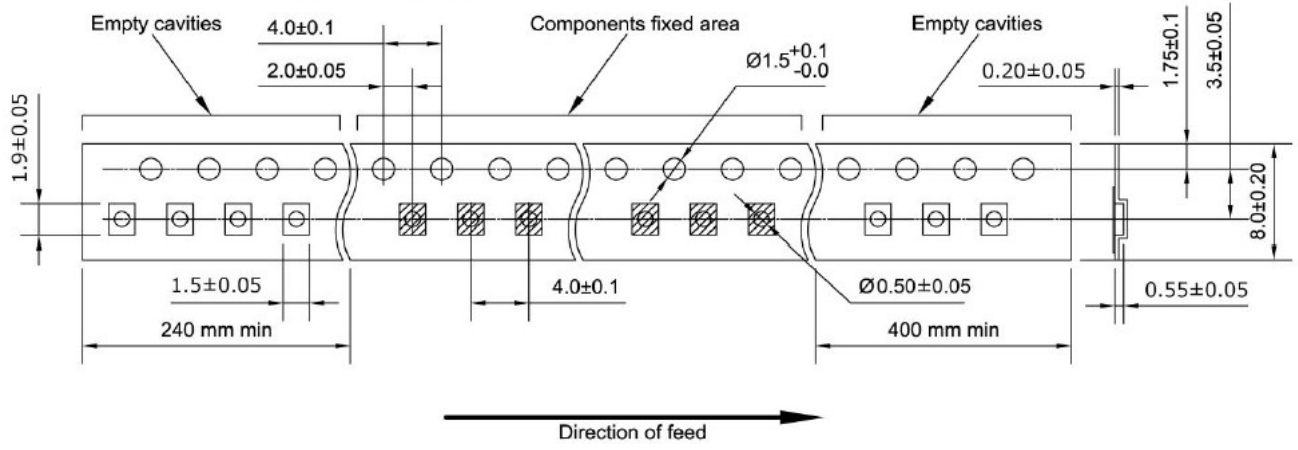
# Reel Dimension



Order	Code	Quantity (pcs./reel)	A	B	C	W1	W2	Tape Pitch
Standard	Y	15,000	φ330	φ100	φ13 ±0.2	9.4 ±1.0	13.4 ±1.0	4.0 ±0.1
Option	Z	3,000	φ180	φ60	φ13 ±0.2	9 +1.0/-0.0	11.4 ±1.0	4.0 ±0.1

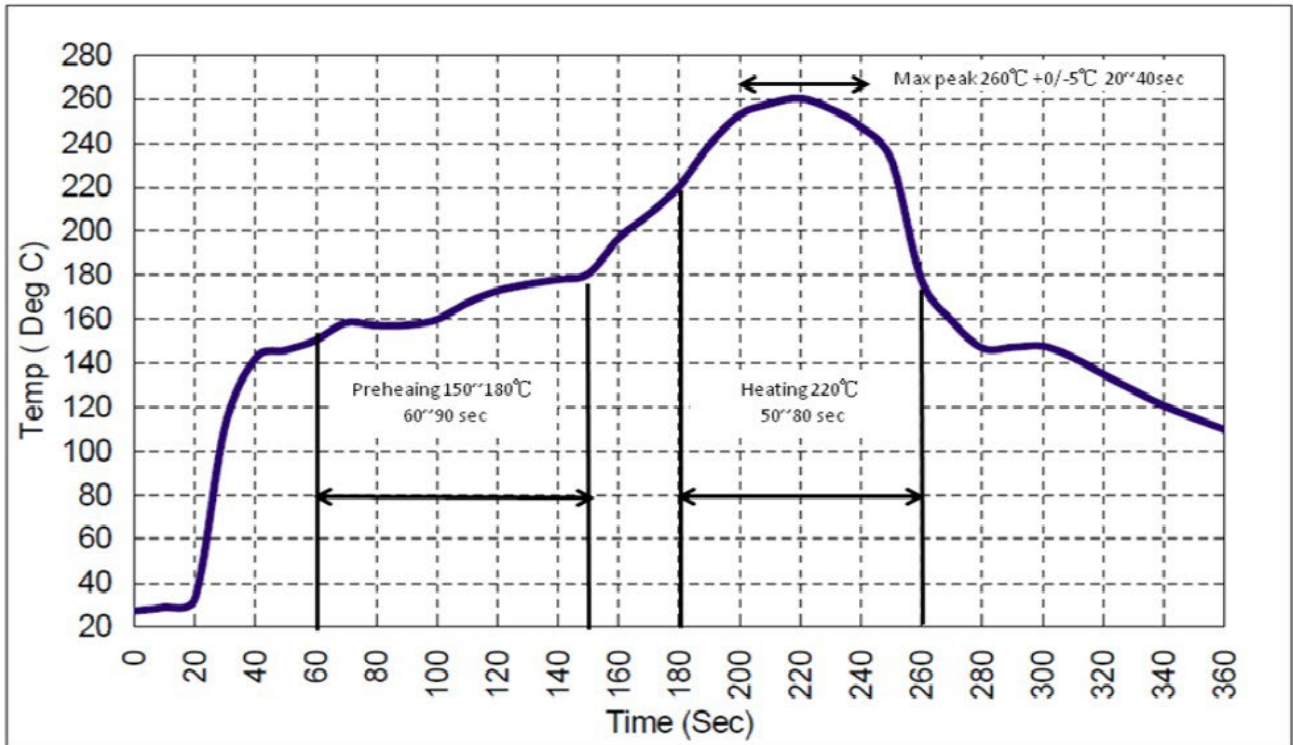
Unit:mm

## Dimensions of Tape (Standard)



## 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 260°C+0/-5°C peak (20~40sec).
4. Time: 2 times.



**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.