

MAXIMUM RATING:

- Maximum Input Power: 15 dBm
- Operating Temperature: -30 °C to +85 °C
- Storage Temperature: -40 °C to +85 °C
- Maximum ESD: +/-50 V (Human body model)
- Moisture Sensitivity Level - 3

ELECTRICAL CHARACTERISTICS:

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

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

SF2510L

**1582.47 MHz
SAW Filter**



SM1109-5

Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency		MHz	-	1582.47	-
Insertion Loss	1574.42 ~ 1576.42 MHz	dB	-	1.2	1.7
	1597.55 ~ 1605.89 MHz	dB	-	2.0	2.5
	1559.05 ~ 1563.14 MHz	dB	-	1.7	2.5
Amplitude Ripple	1574.42 ~ 1576.42 MHz	dB _{p-p}	-	0.1	0.8
	1597.55 ~ 1605.89 MHz	dB _{p-p}	-	0.55	0.14
	1559.05 ~ 1563.14 MHz	dB _{p-p}	-	0.2	1.2
Group Delay Ripple	1574.42 ~ 1576.42 MHz	nsec	-	1.0	6.0
	1597.55 ~ 1605.89 MHz	nsec	-	6.0	12.5
	1559.05 ~ 1563.14 MHz	nsec	-	5.0	16.0
VSWR(Input/Output)	1574.42 ~ 1576.42 MHz	-	-	1.5	2.1
	1597.55 ~ 1605.89 MHz	-	-	1.4	2.0
	1559.05 ~ 1563.14 MHz	-	-	1.5	2.0



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

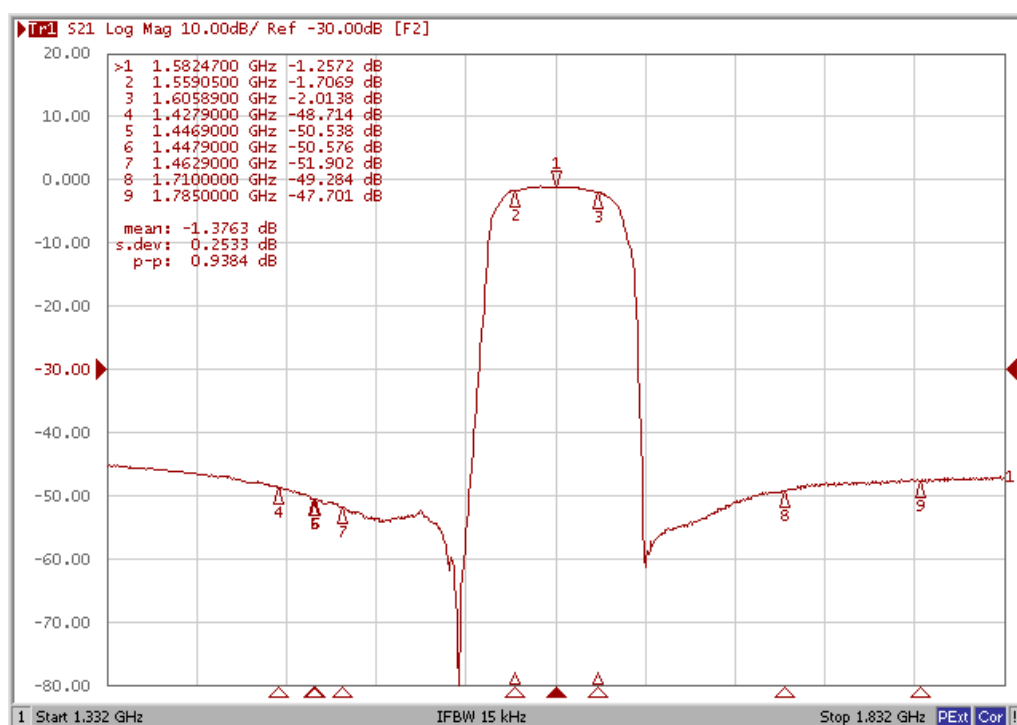
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

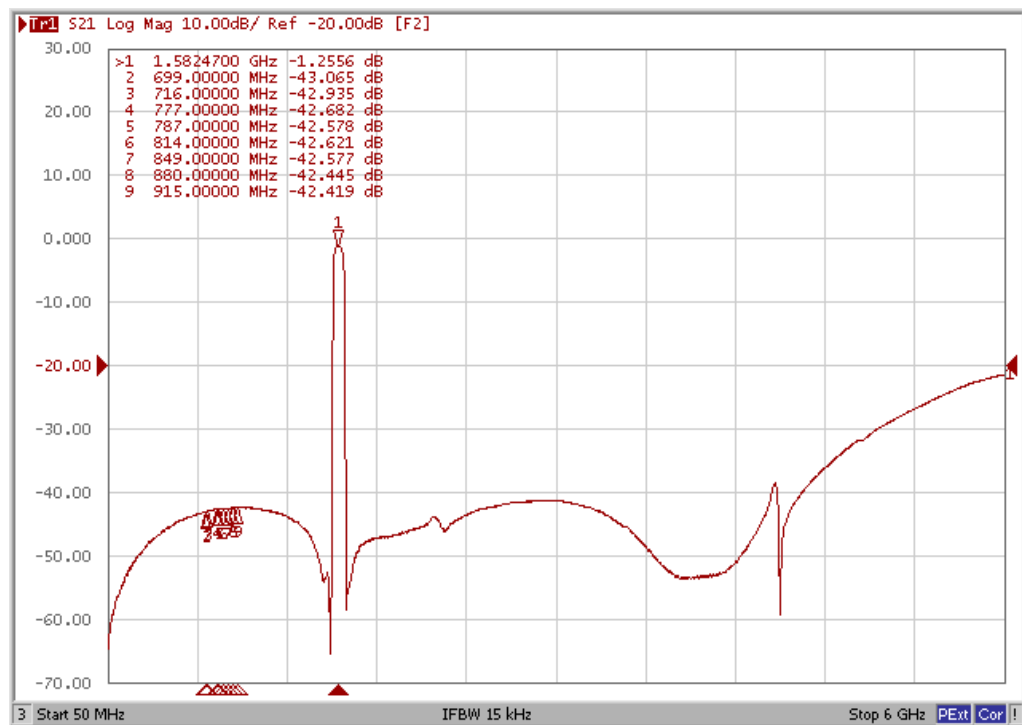
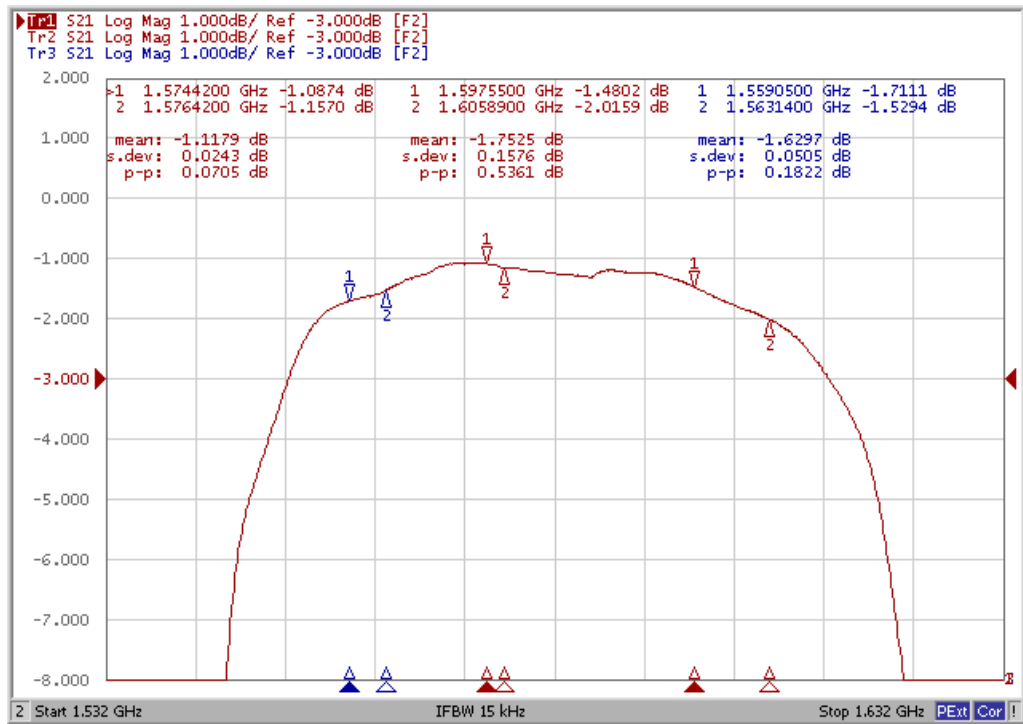
Attenuation:				
699.0~716.0 MHz	dB	37	42	-
777.0~787.0 MHz	dB	37	42	-
814.0~849.0 MHz	dB	37	42	-
880.0~915.0 MHz	dB	37	42	-
1427.9~1446.9MHz	dB	43	48	-
1447.9~1462.9 MHz	dB	45	50	-
1710.0~1785.0 MHz	dB	40	47	-
1850.0~1915.0 MHz	dB	40	46	-
1920.0~1980.0 MHz	dB	40	46	-
2400.0~2500.0 MHz	dB	37	42	-
2500.0~2570.0 MHz	dB	37	42	-

Notes: (1) No Matching Network.

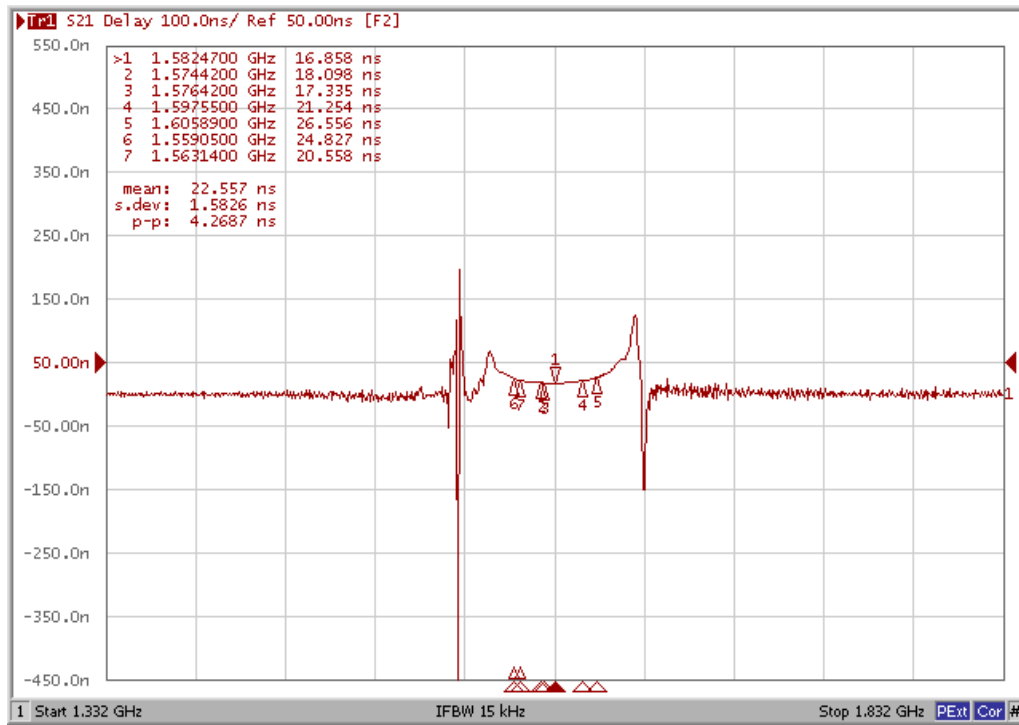
FREQUENCY CHARACTERISTIC:

Frequency Response

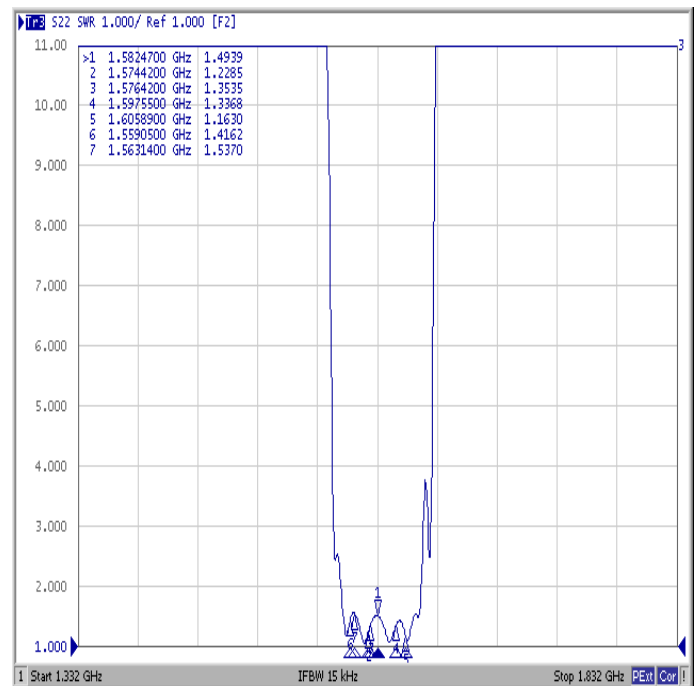




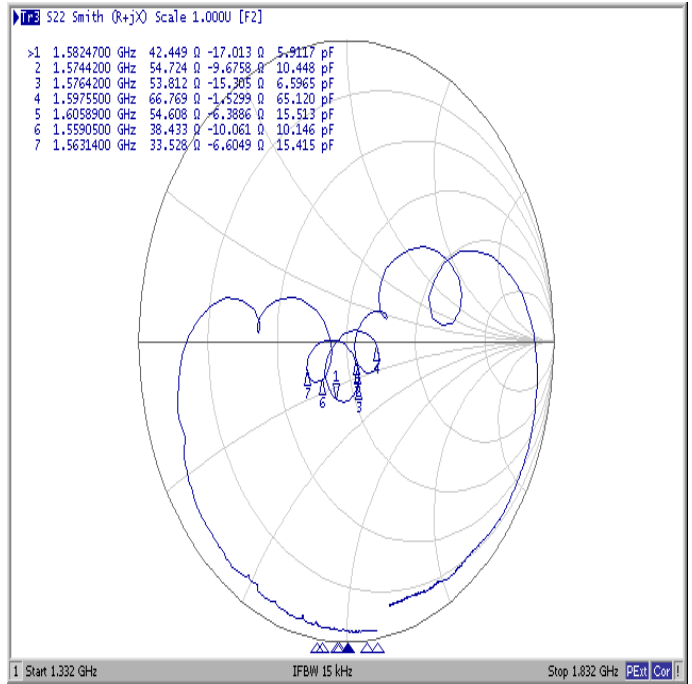
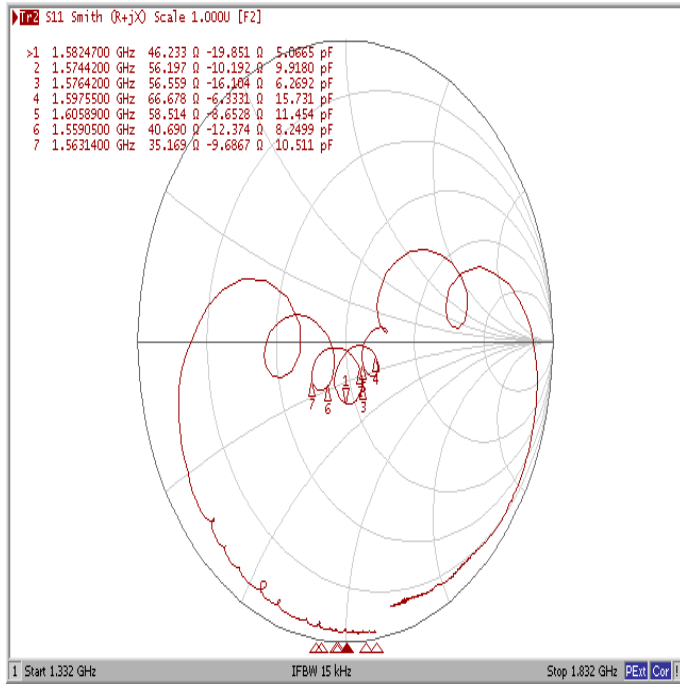
Group Delay Ripple



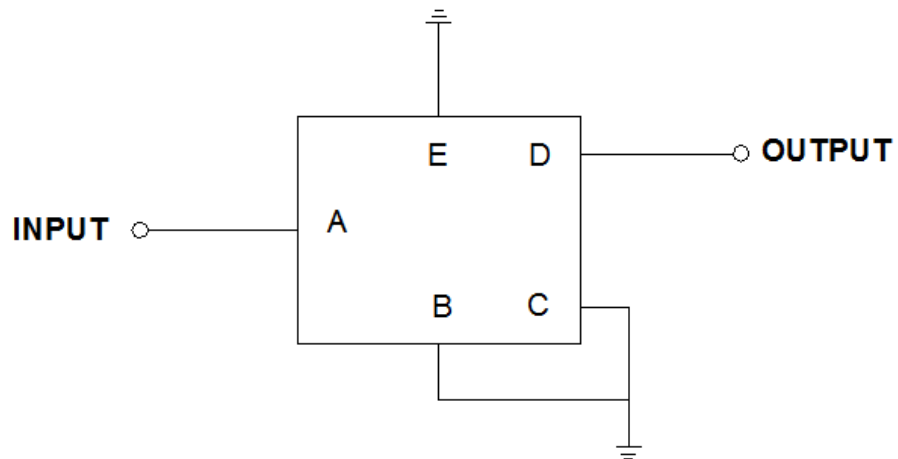
VSWR



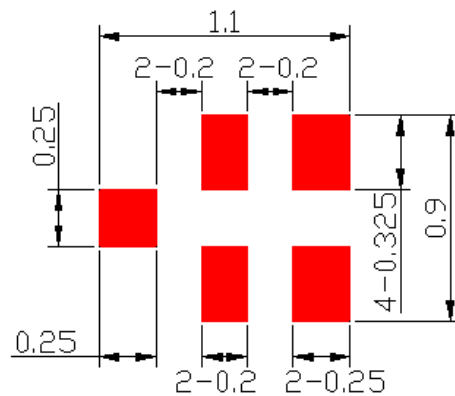
Smith Chart



MEASUREMENT CIRCUIT:

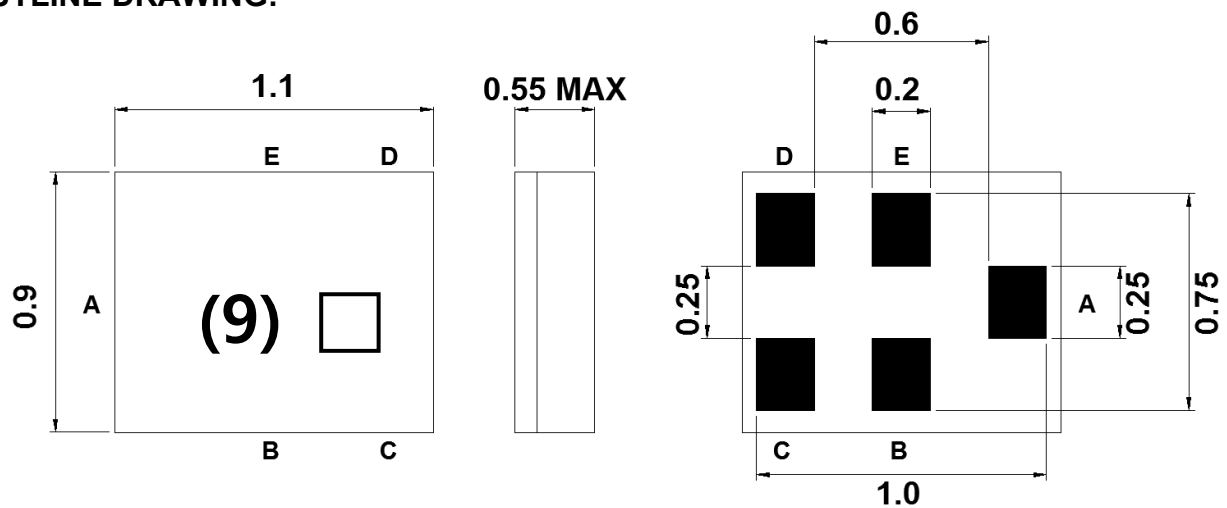


PCB Footprint:



: Land Pattern
Unit: mm

OUTLINE DRAWING:



Marking Descriptions	
(9)	Series Number
□	Date Code(Year+Month)

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

Date code:

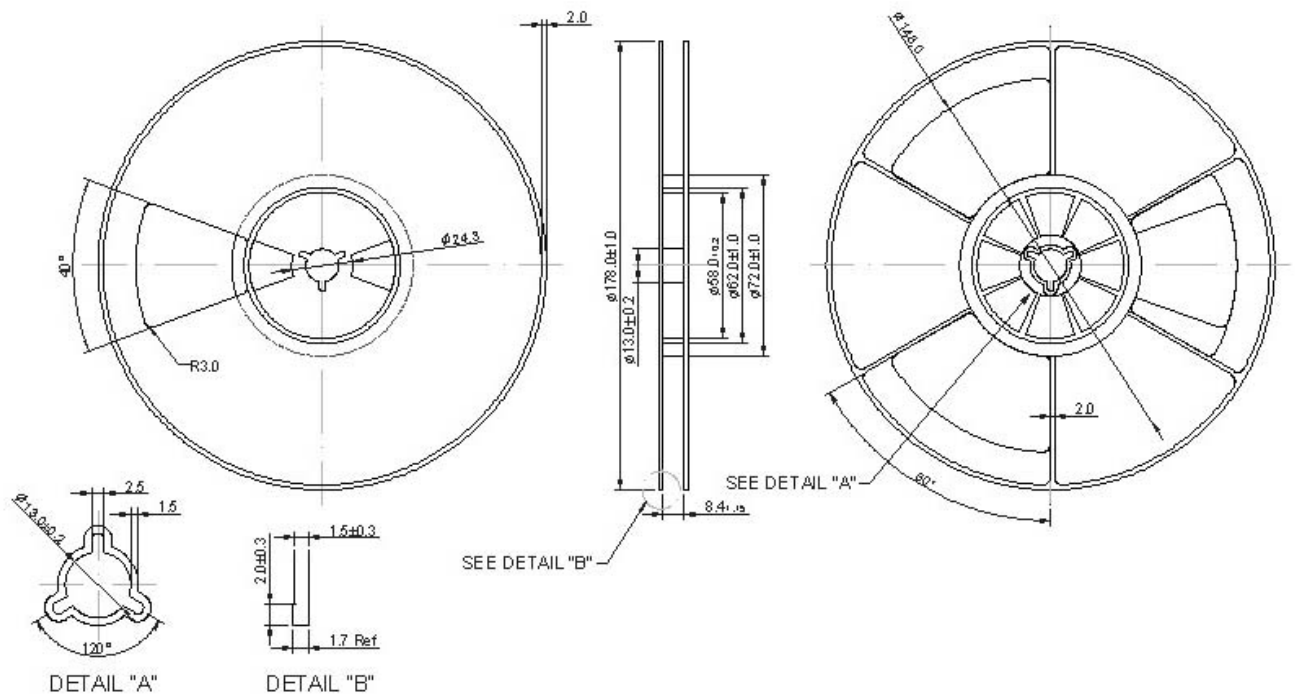
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>I</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>j</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

PACKING

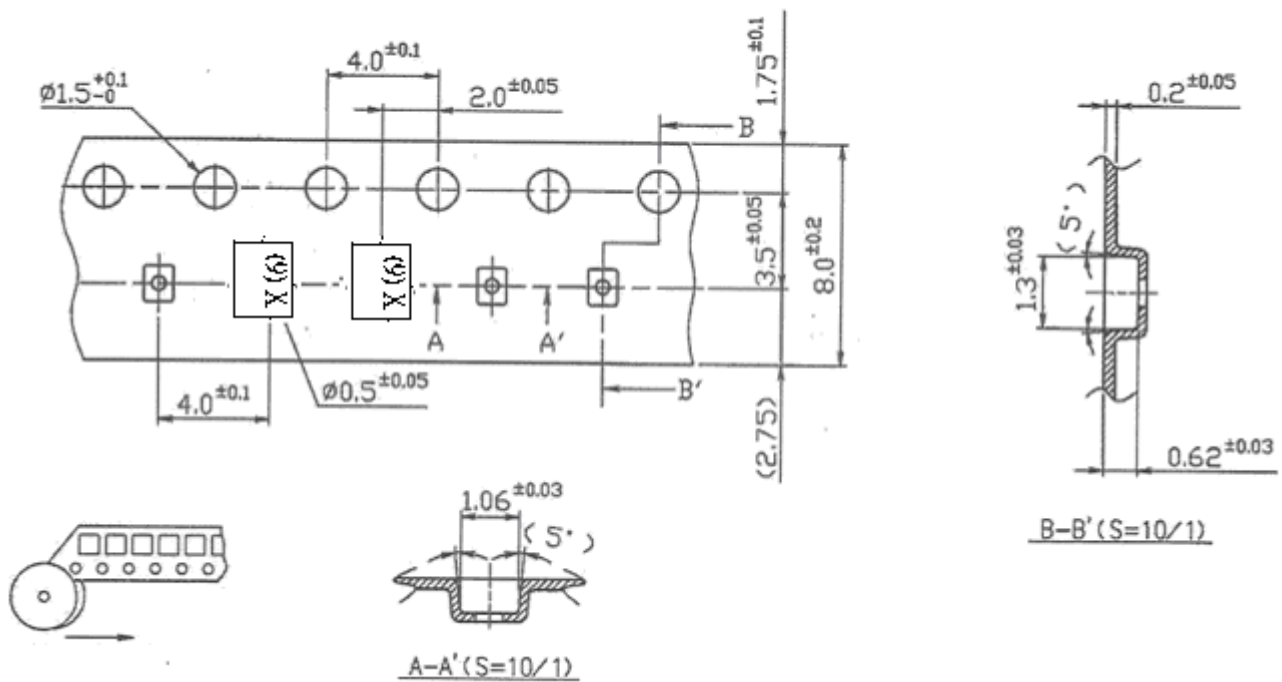
1. REEL DIMENSION

Reel Count:

7" = 5000



2. TAPE DIMENSION



RECOMMENDED TEMPERATURE PROFILE OF REFLOW SOLDERING:

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.

