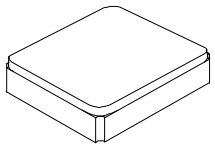
RFMi
A BRAND OF AKOUSTIS

RoHS compliant

SF2460H

1254.15 MHz SAW Filter

- ***RF Filter Designed for Front End GPS Applications***
- ***Low Insertion Loss***
- ***Improved Rejection***
- ***2.0 x 1.6 mm Surface-Mount Case***
- ***Complies with Directive 2002/95/EC (RoHS)***
- ***AEC-Q200 Qualified***



SM2016-4

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage	3	VDC
Operable Temperature Range	-40 to +105	°C
Specification Temperature Range	-40 to +105	°C
Storage Temperature Range	-40 to +105	°C
Moisture Sensitivity Level	1	MSL
Maximum Soldering Profile	265°C for 10 s	

Electrical Characteristics

Item		Unit	Min.	Typ.	Max.	Note
Center frequency	**Fc**	MHz	-	1254.15	-	-
Insertion Loss (1219.8~1288.5 MHz)	**IL**	dB	-	4	5.0	-40~+85°C
Insertion Loss (1219.8~1288.5 MHz)	**IL**	dB	-	4	5.2	-40~+105°C
Amplitude Ripple (1219.8~1288.5 MHz)		dB	-	1.1	2.0	-
Group Delay Ripple (1219.8~1288.5 MHz)		ns	-	4	20	-
Return Loss (1219.8~1288.5 MHz)		dB	6.5	7.5	-	-
Attenuation (Reference level from 0 dB)						
800 ~ 920 MHz		dB	37	41	-	-
1710 ~ 1780 MHz		dB	39	43	-	-
1850 ~ 1910 MHz		dB	39	42	-	-
1920 ~ 1980 MHz		dB	40	44	-	-
2400 ~ 2500 MHz		dB	41	46	-	-
Temperature coefficient of frequency		ppm/k	-	-80	-	-

Single-ended Input / Output Impedance Match	No matching network required for operation at 50 ohms
Case Style	SM2016-4
Lid Symbolization (Y=year, W=week)	A2, YW

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

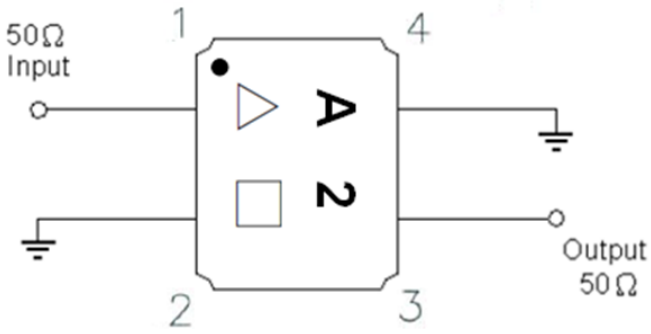
NOTES:

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.

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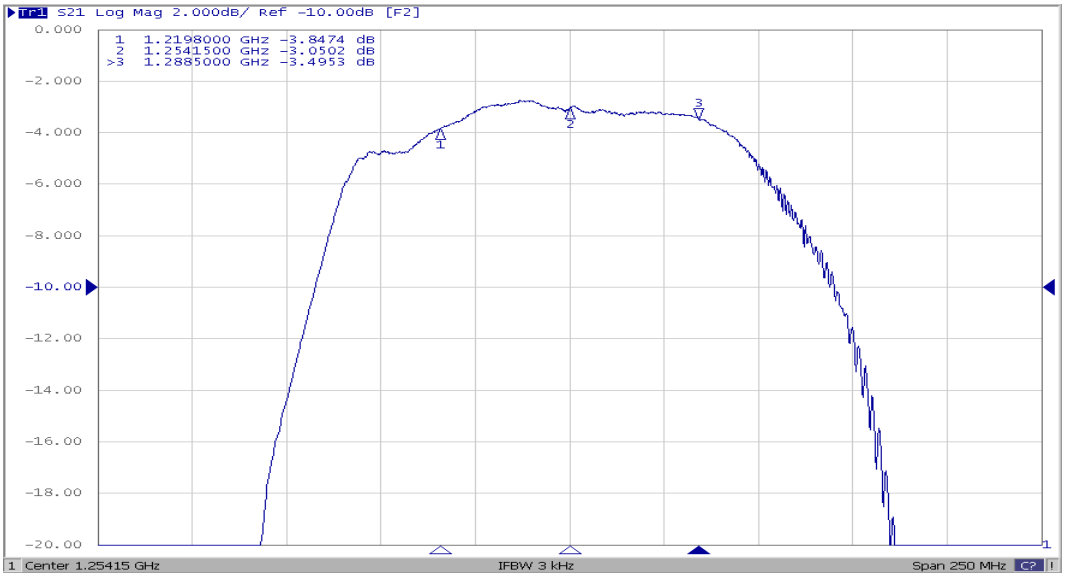
Measurement Circuit

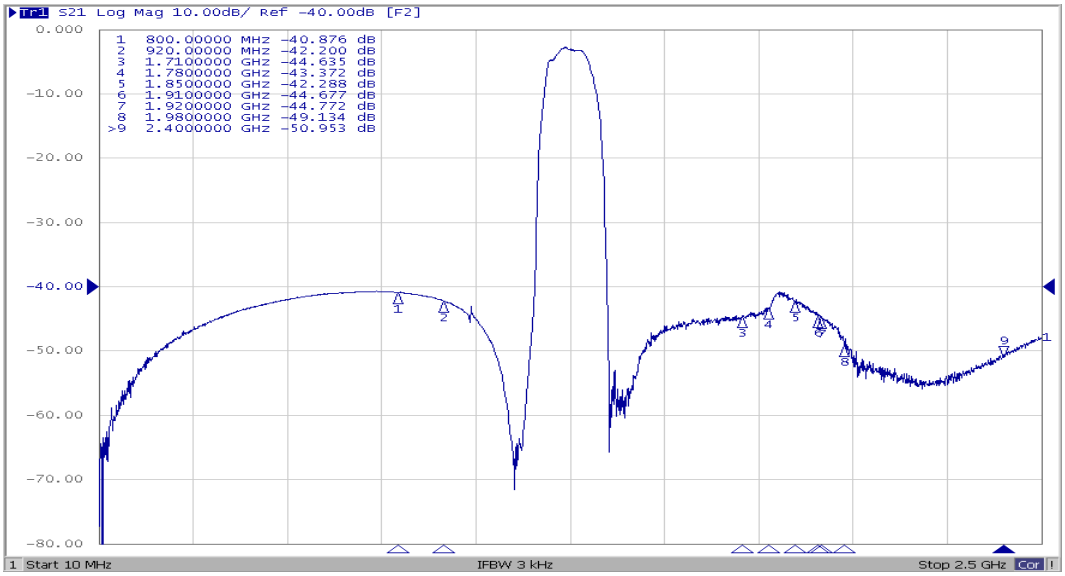
Connections	Terminal
Input	1
Output	3
Ground	2, 4



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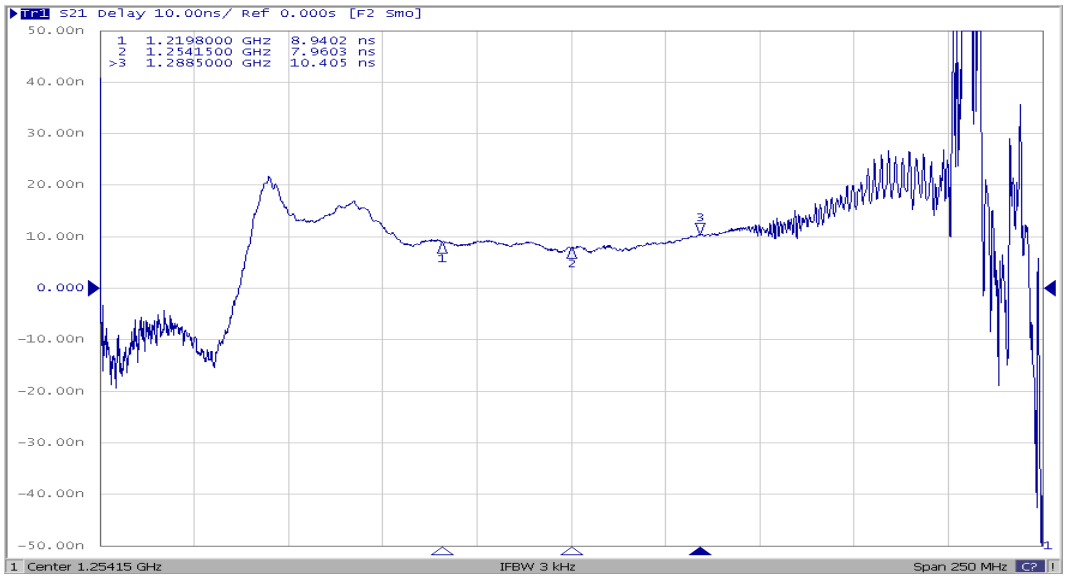
Frequency Characteristics





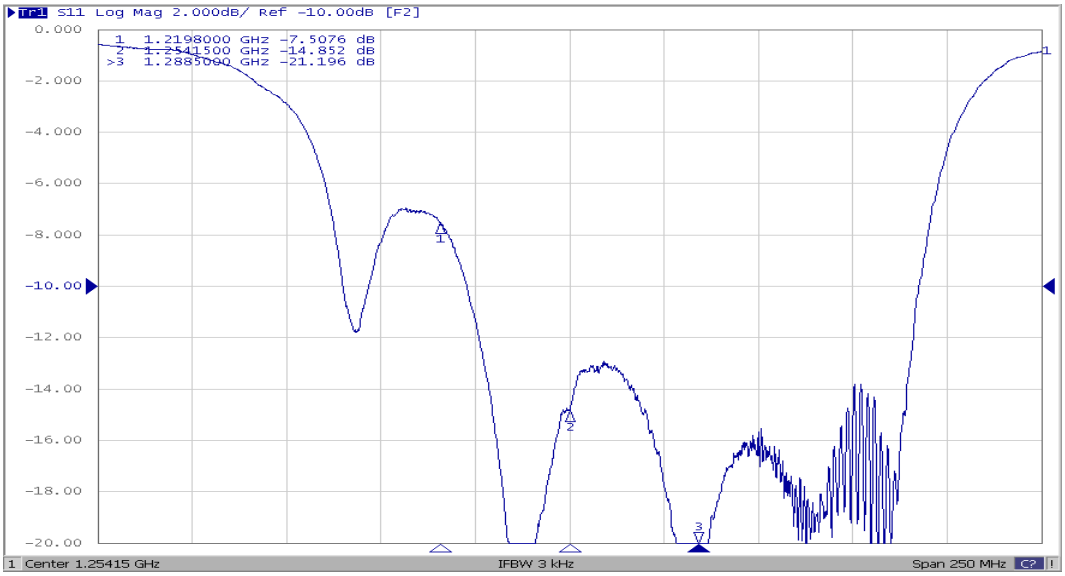
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Group Delay

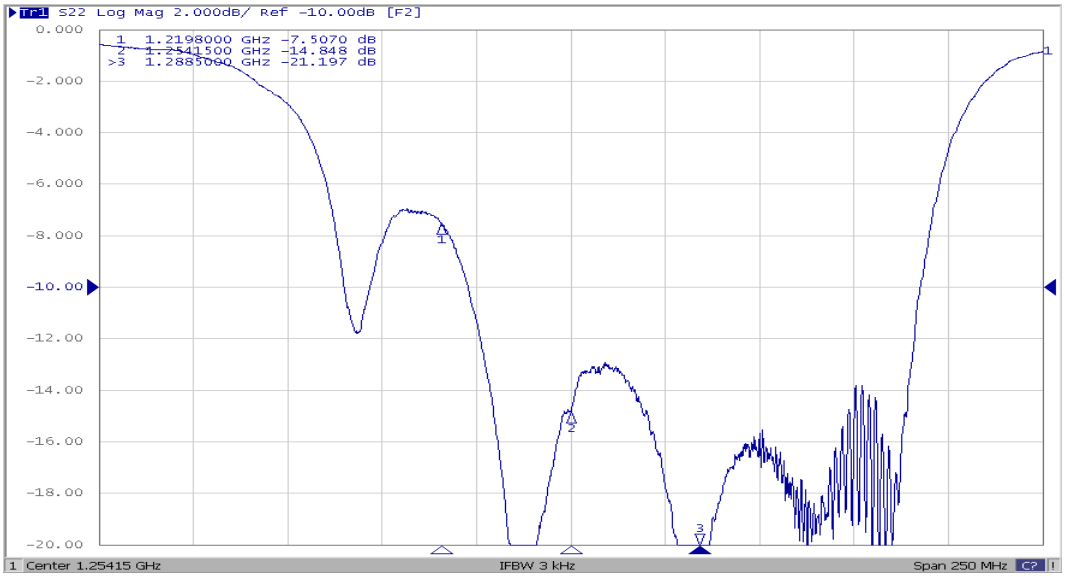

Tr1 S21 Delay 10.00ns/ Ref 0.000s [F2 Smo]
1 1.2198000 GHz 8.9402 ns
2 1.2541500 GHz 7.9603 ns
>3 1.2885000 GHz 10.405 ns
50.00n
40.00n
30.00n
20.00n
10.00n
0.000
-10.00n
-20.00n
-30.00n
-40.00n
-50.00n
1 Center 1.25415 GHz
IFBW 3 kHz
Span 250 MHz

Reflection Functions

S11

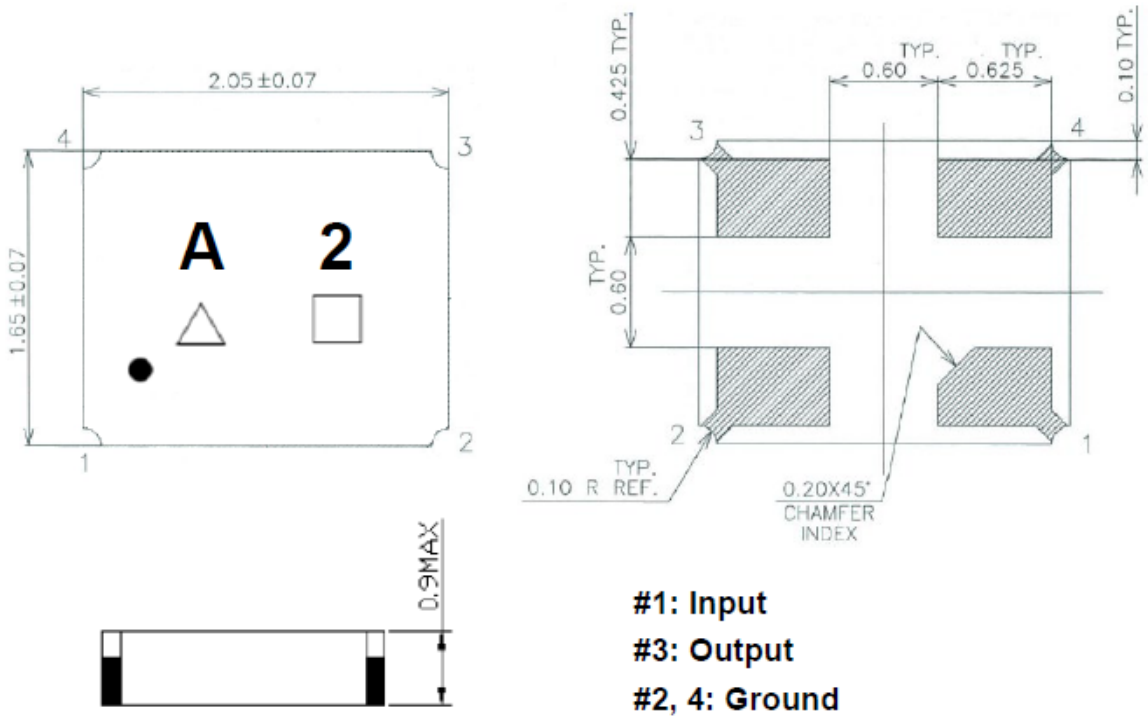


S22



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Outline Drawing



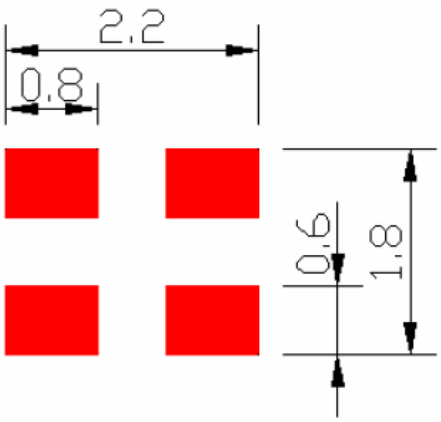
#1: Input
#3: Output
#2, 4: Ground
Unit: mm

△: Year Code (2020->0, 2021->1,…,2029->9)

□: Date Code (Follow the table from planner each year)

Date Code Table												
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

PCB Footprint



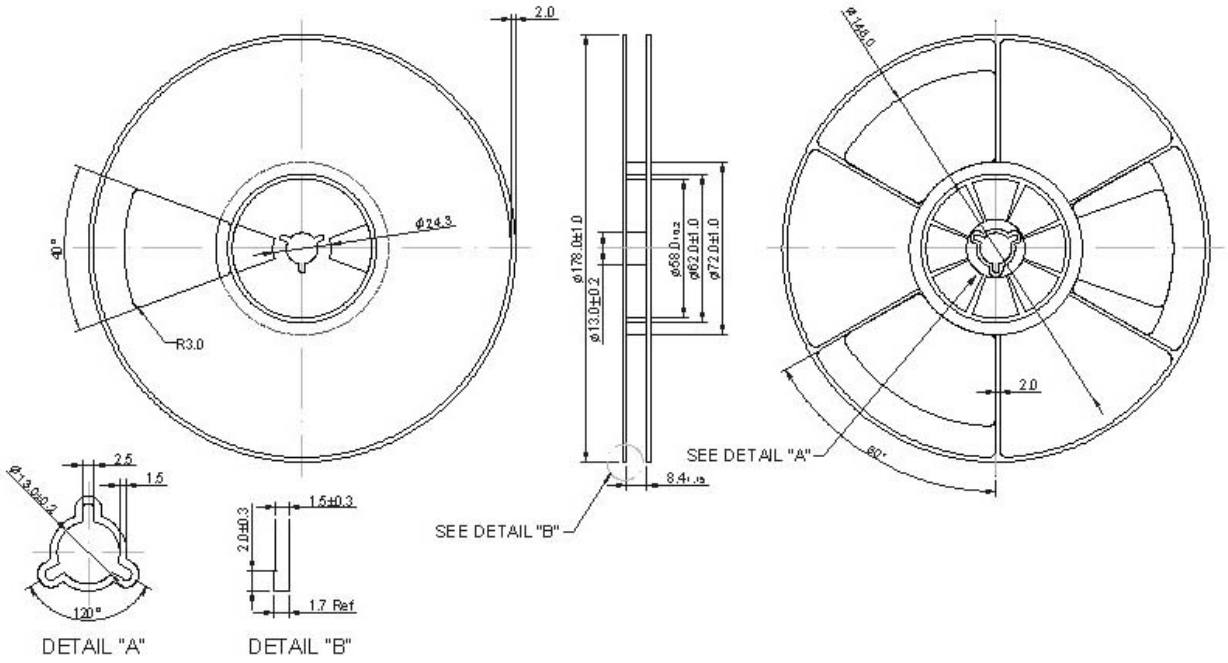
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Packing

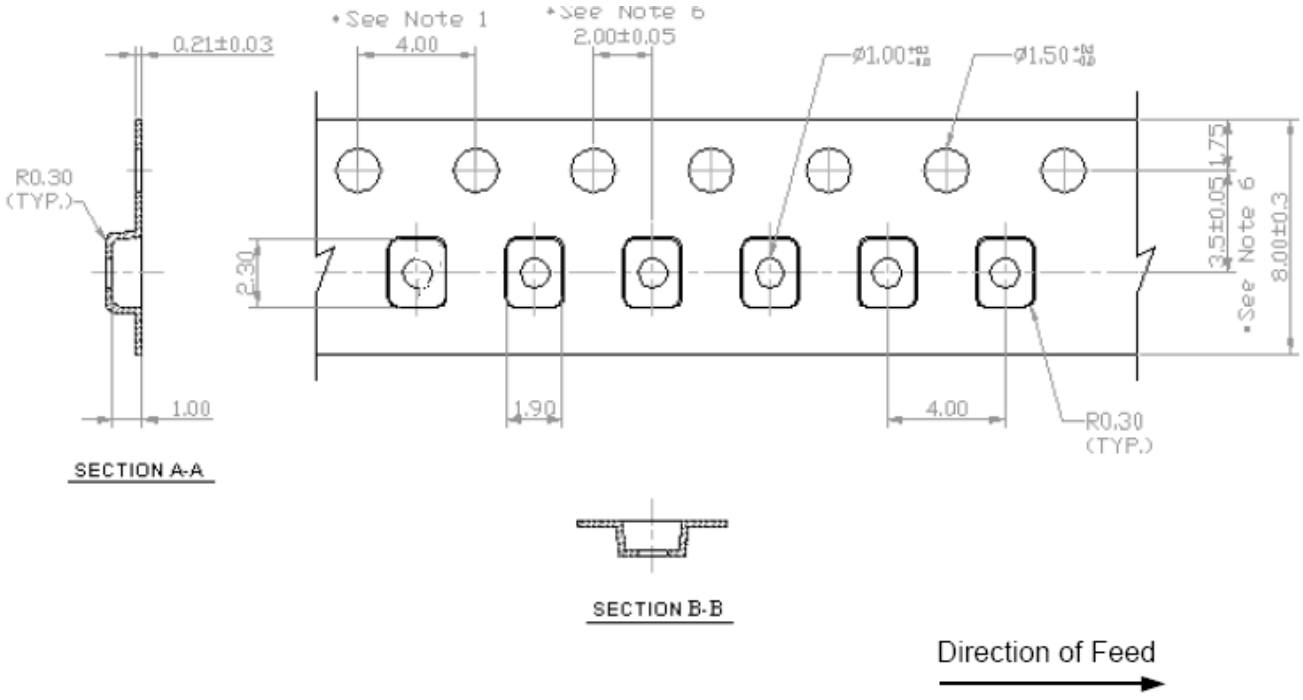
Tape and Reel Standard per ANSI/EIA-481

Reel Dimension

Reel Count:
7" = 2000
13" = 10,000



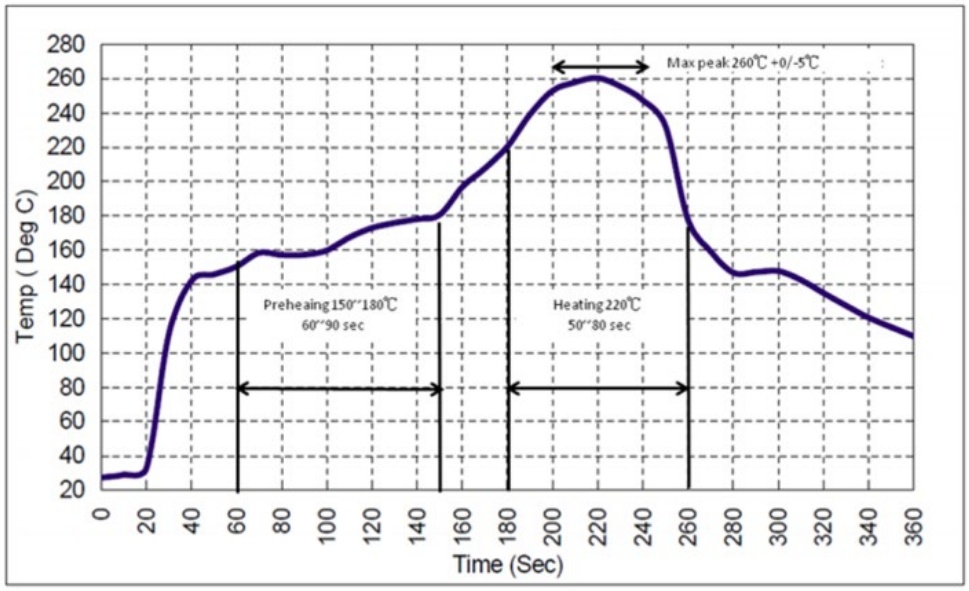
Tape Dimension



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Recommended Reflow Profile

1. Preheating shall be fixed at 150~180ºC for 60~90 seconds.
2. Ascending time to preheating temperature 150ºC shall be 30 seconds min.
3. Heating shall be fixed at 220ºC for 50~80 seconds and at 260ºC +0/-5ºC peak (10 seconds).
4. Time: 5 times maximum.



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RFMi:

PX1002 RO3101D-1 SF1088A SF2040B SF2176E SF2198E SF2236E RF3181E RF3336D SF2133E SF2201E RF1172C SF2173E SF2391E RO3073A RO3104E SF2214E SF2250E RO3101A SF1186B-3 SF2141B SF2204E-1 SF2271C SF2321D XTL2094H-3 SF2229A SF1186H-3 SF2205E SF2250E-1 SF2421D