RFMi
A BRAND OF AKOUSTIS

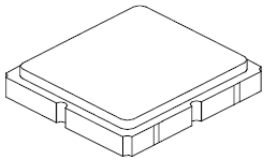
Preliminary

RoHS compliant

SF2428E

1234.5 MHz SAW Filter

- ***Designed for Front-end GPS Applications***
- ***Low Insertion Loss***
- ***3.0 x 3.0 x 1.3 mm Surface-mount Case***
- ***No Matching Circuit Required***
- ***Complies with Directive 2002/95/EC (RoHS)***
- ***Moisture Sensitivity Level:1***
- ***AEC-Q200 Qualified***



SM3030-6

Maximum Ratings at +25 °C Unless Stated Otherwise

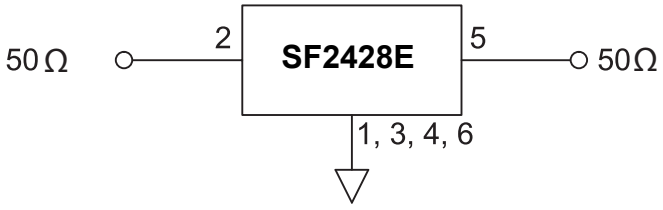
Rating	Value	Units
Maximum Input Power Level	+10	dBm
DC Voltage	3	Volts
Operating Temperature Range	-40 to +105	°C
Storage Temperature Range	-40 to +125	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	**Fc**			1234.5		MHz
Maximum Insertion Loss (1215 to 1254 MHz)	**IL**			2.8	4.0	dB
Amplitude Ripple (1215 to 1254 MHz)				0.7	2.0	
Group Delay Ripple				16	50	ns
Attenuation Referenced to 0 dB:						dB
10 to 1170 MHz			40	57		
1170 to 1185 MHz			30	53		
1300 to 1340 MHz			30	42		
1340 to 2000 MHz			40	52		
Temperature Coefficient of Frequency				-36		ppm/°C
Lid Symbolization (Y=year, WW=week, S=shift), dot = Pin 1 Indicator	8M, YWWS					

Electrical Connections

Pin #	Description	Pin #	Description
1	Ground	4	Ground
2	Input	5	Output
3	Ground	6	Ground



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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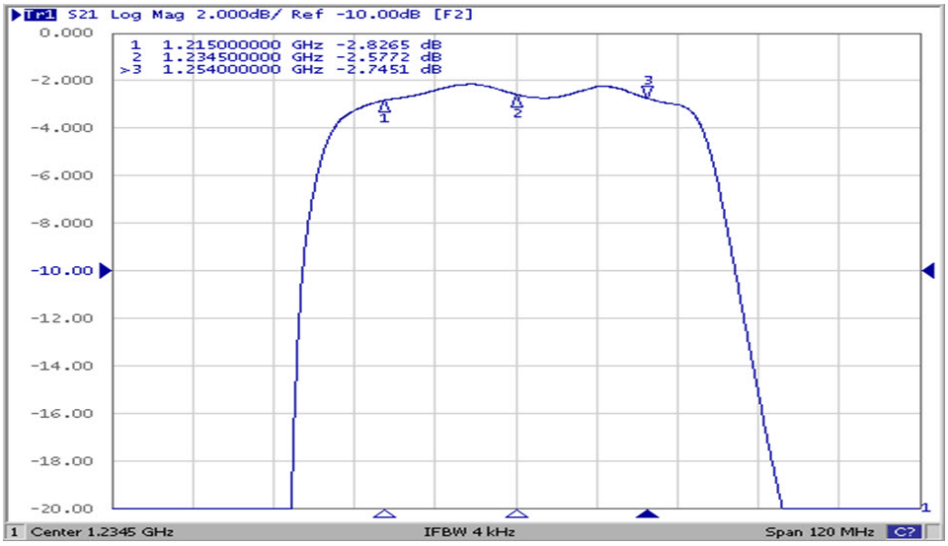
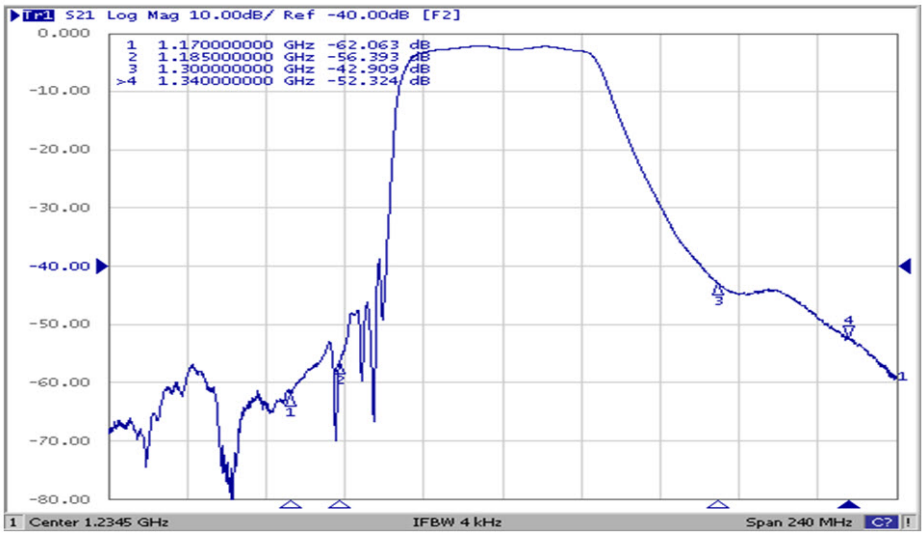
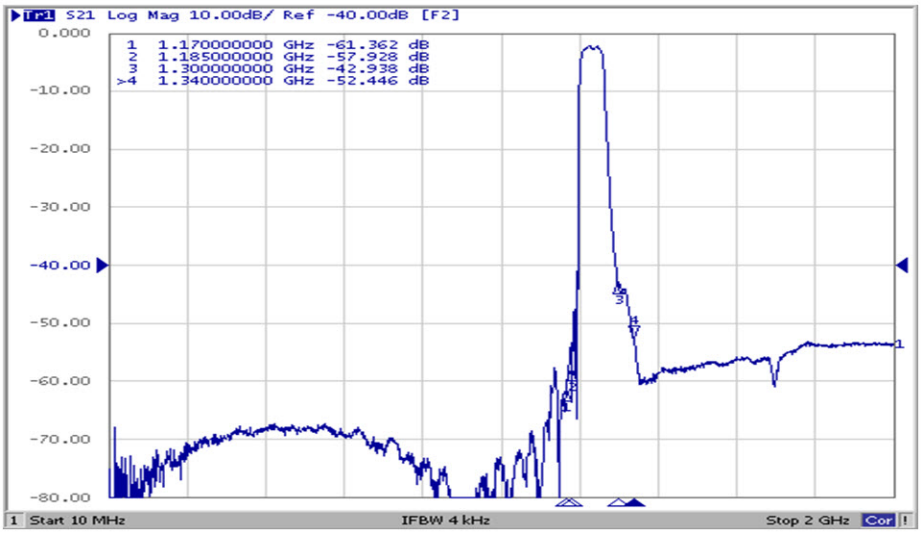
Frequency Characteristics







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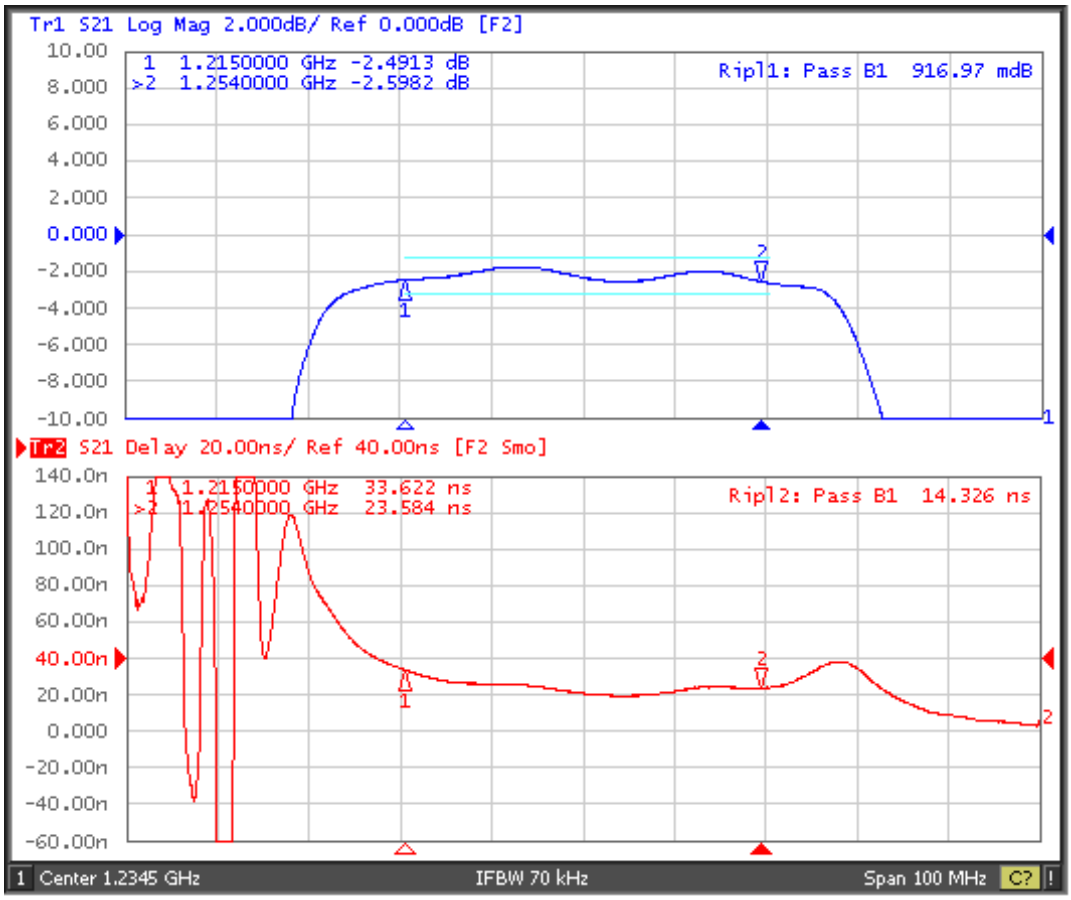

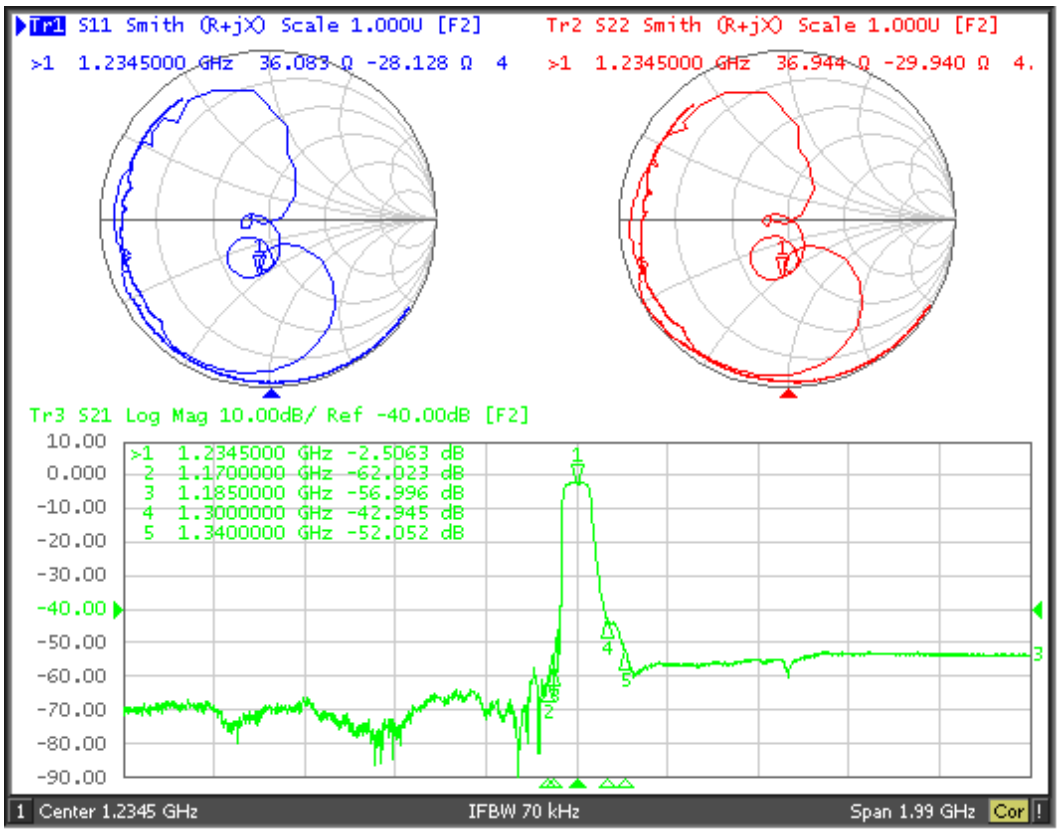

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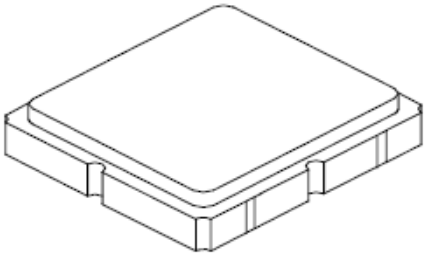
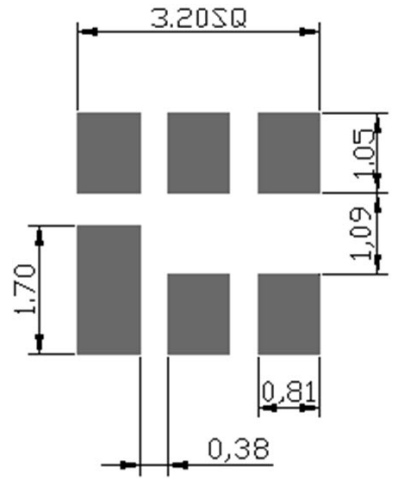
SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint





Foot Print Dimensions in Millimeters

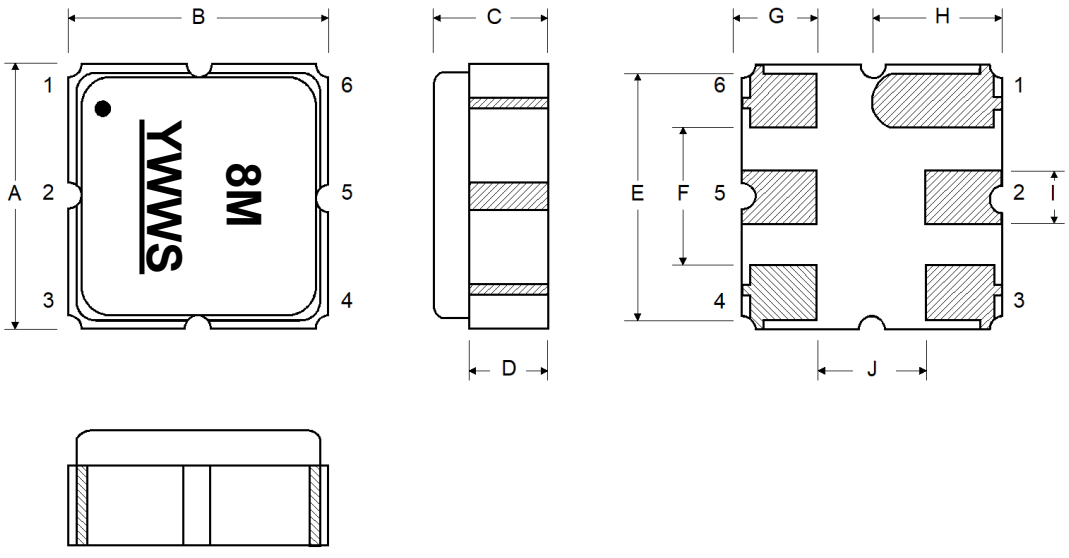
Case Dimensions						
Dimension	**mm**			**Inches**		
	Min	**Nom**	**Max**	**Min**	**Nom**	**Max**
A	-	3.0	-	-	0.118	-
B	-	3.0	-	-	0.118	-
C	-	-	1.4	-	-	0.055
D	-	0.9	-	-	0.035	-
E	-	2.80	-	-	0.110	-
F	-	1.6	-	-	0.063	-
G	-	0.85	-	-	0.033	-
H	-	1.5	-	-	0.059	-
I	-	0.6	-	-	0.024	-
J	-	1.3	-	-	0.051	-

Electrical Connections		
Connection		**Terminals**
Port 1	Single-ended Input	2
Port 2	Single-ended Output	5
	Ground	All others
Single-ended Operation Only		
Dot indicates Pin 1		

Case Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic

TOP VIEW

BOTTOM VIEW



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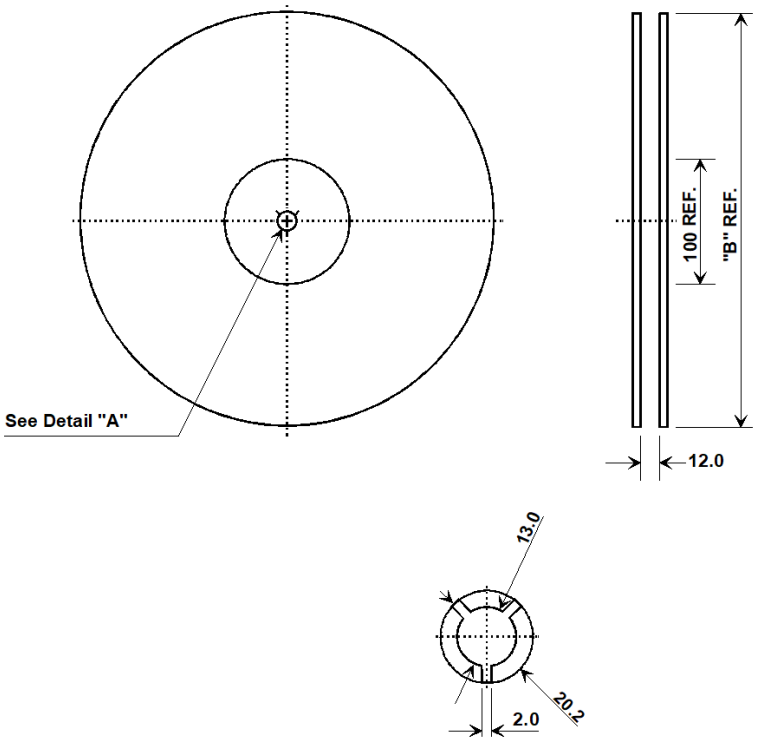
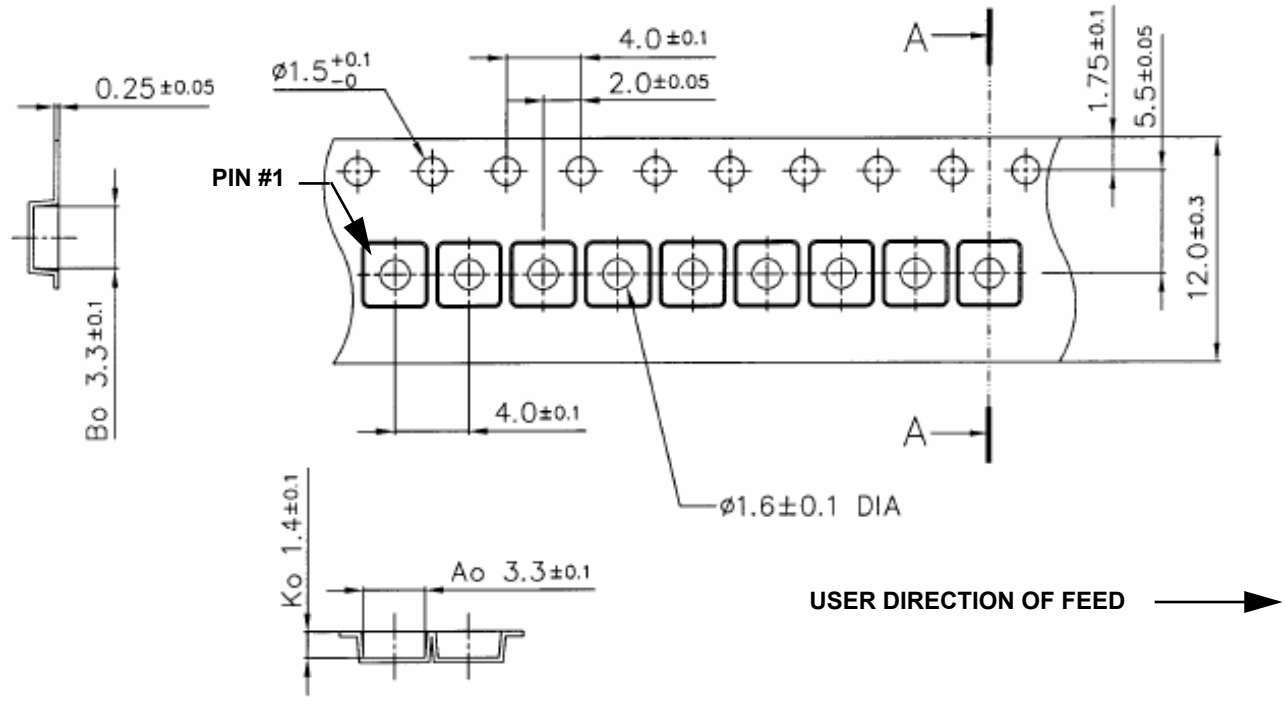
Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481



"B"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000

COMPONENT ORIENTATION



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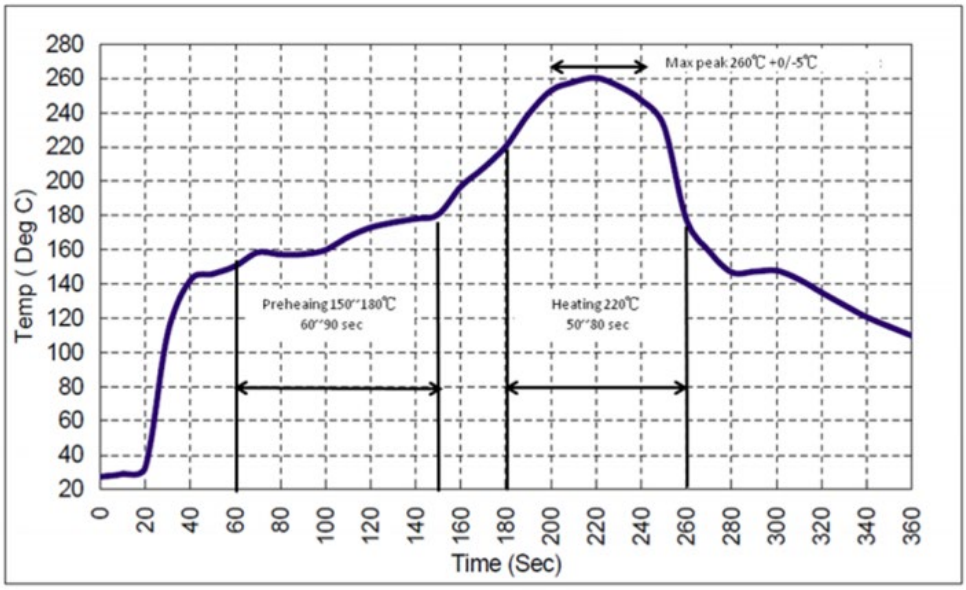
Recommended Reflow Profile

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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