



AEC-Q200

This component was always
RoHS compliant from the first
date of manufacture.

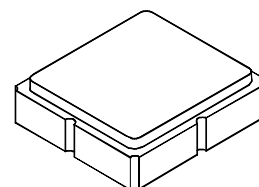
- **Low-Loss Quartz Design**
- **Simple External Impedance Matching**
- **Complies with Directive 2002/95/EC (RoHS)**



Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	12	VDC
Storage Temperature	-40 to +85	°C
Operable Temperatures Range	-40 to +125	°C
Specification Temperature Range	-20 to +70	°C
Soldering Temperature (10 seconds / 5 cycles max.)	260	°C

RF3715E

**500 MHz
SAW Filter**



**SM3030-8 Case
3.0 x 3.0**

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency	f_c			500		MHz
Insertion Loss @500 MHz	IL			2.7	3.8	dB
3 dB Bandwidth	BW ₃		0.8	1.0		MHz
Rejection Reference @ 500 MHz						dB
10 - 498.4 MHz			22	26		
498.4 - 499.0 MHz			15	26		
501.0 - 501.8 MHz			15	20		
501.8 - 1000 MHz			23	25		
Temperature Freq. Temp. Coefficient	FTC			0.032		ppm/°C ²
Turnover Temperature	T _o			+15		°C
Frequency Aging Absolute Value during the First Year	fA			<±10		ppm/yr
Lid Symbolization (in addition to Lot and/or Date Codes)	C9, YWWS					
Standard Reel Quantity 7 Inch Reel				500 Pieces/Reel		
Standard Reel Quantity 13 Inch Reel				3000 Pieces/Reel		



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

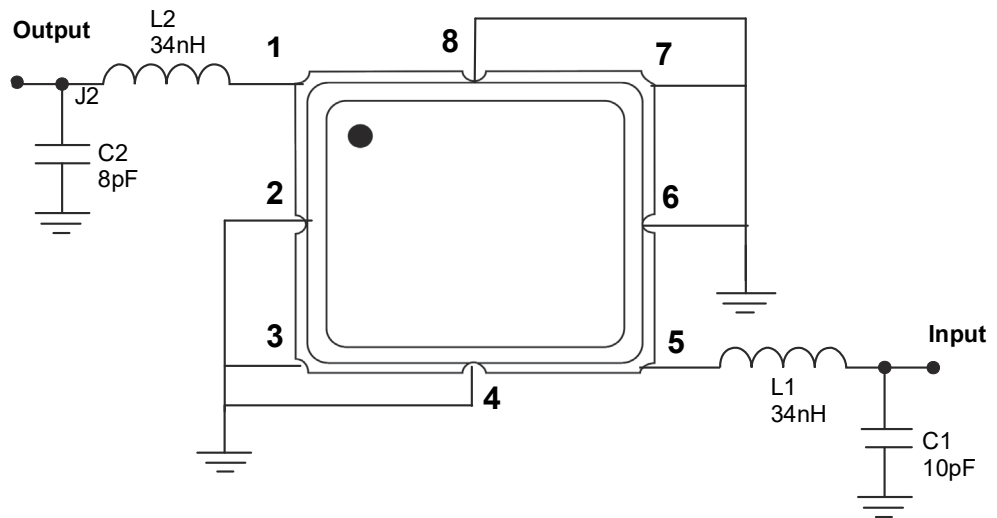
NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

Matching Circuit to 50Ω

Optional Electrical Connections

Pin	Connection
1	Output
2	To Be Grounded
3	To Be Grounded
4	Case Ground
5	Input
6	To Be Grounded
7	To Be Grounded
8	Case Ground



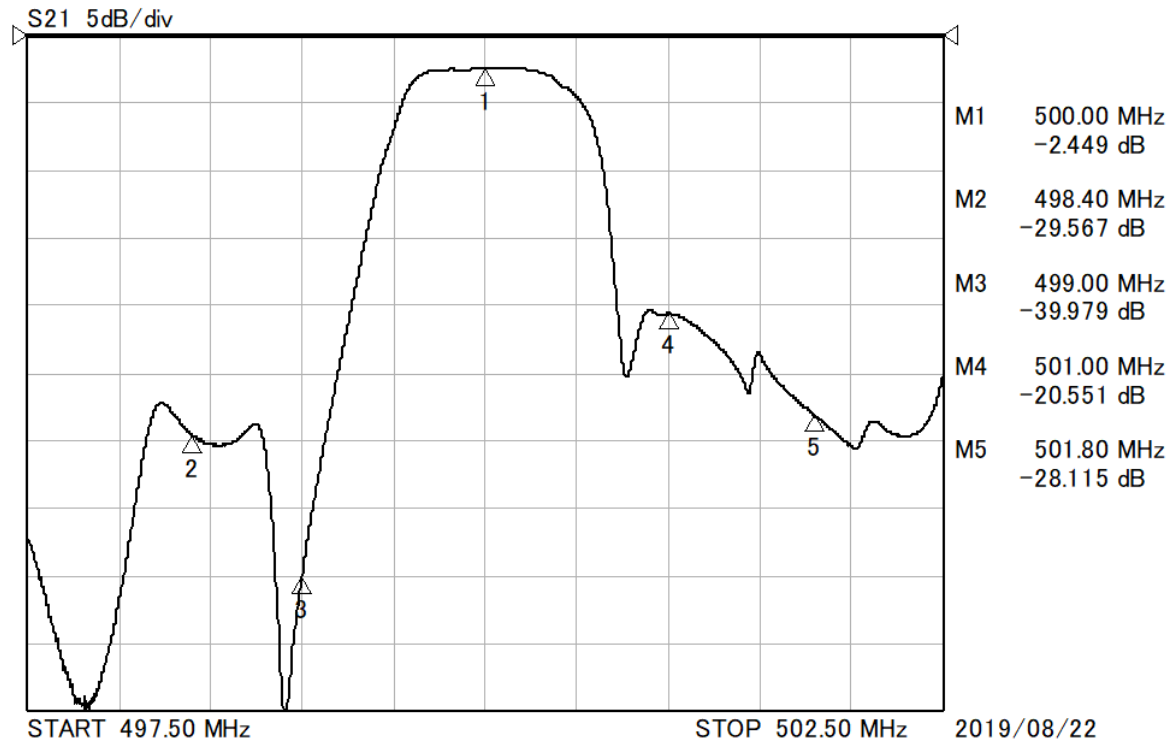
Frequency Characteristics

S21 Response (Span: 2 MHz)

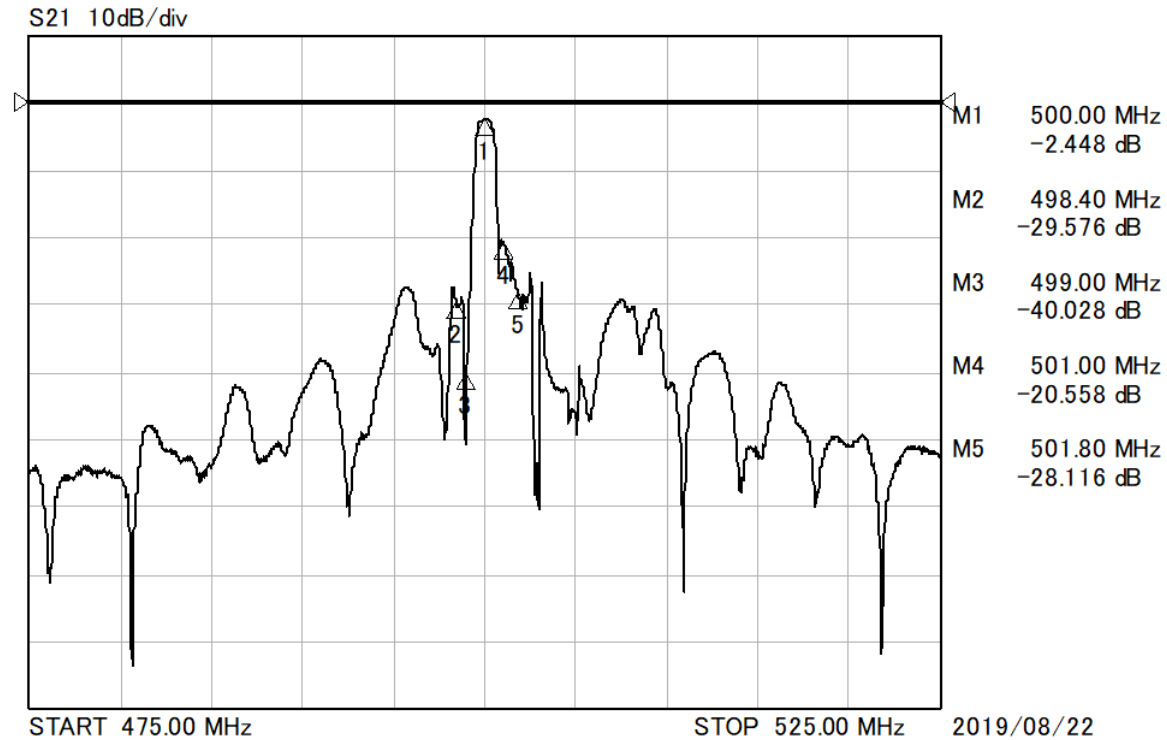


Frequency Characteristics

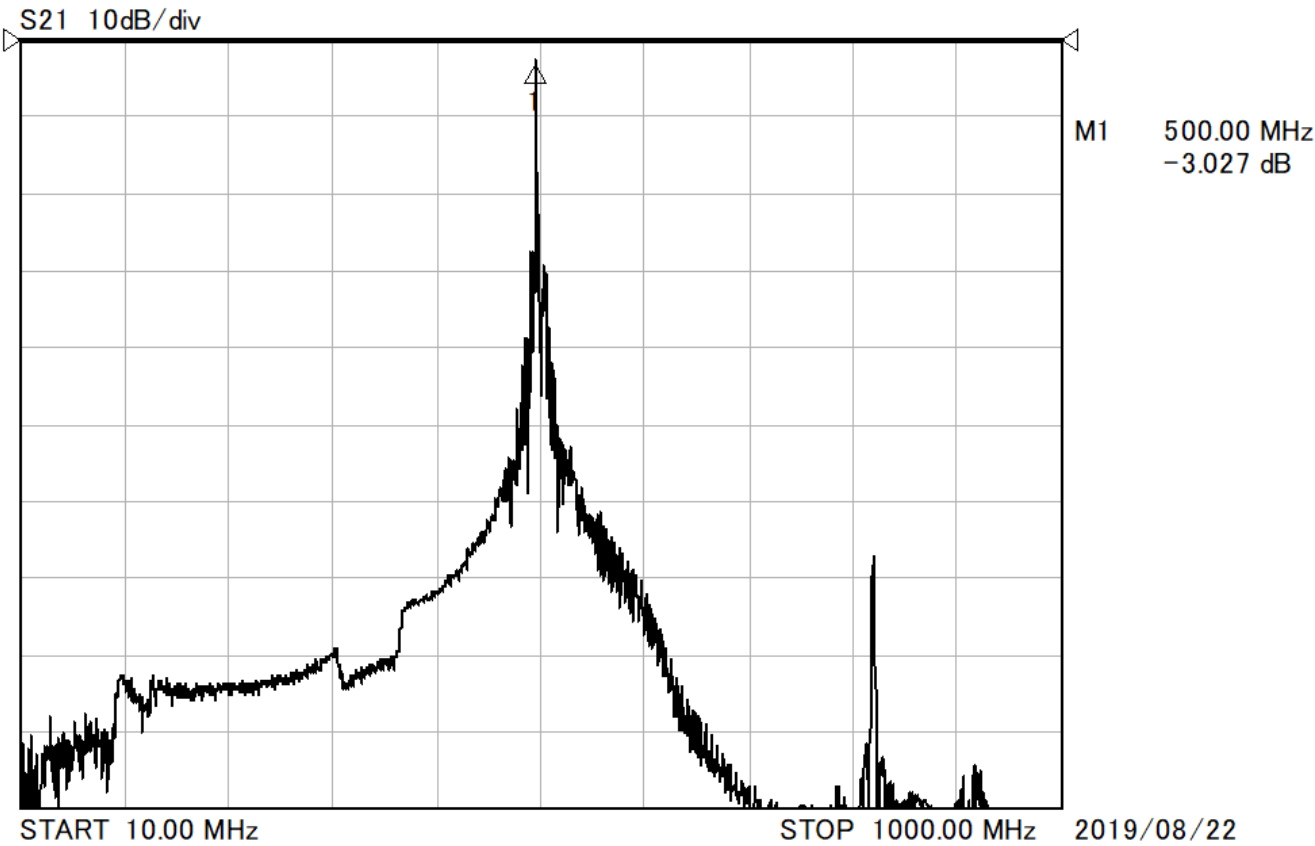
S21 Response (Span: 5 MHz)



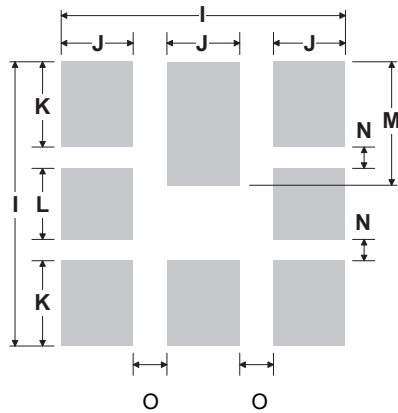
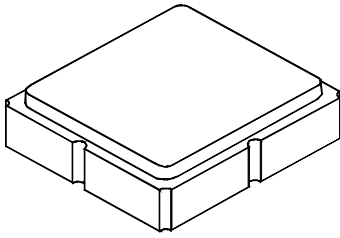
S21 Response (Span: 50 MHz)



S21 Response (Span: 990 MHz)



8-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint



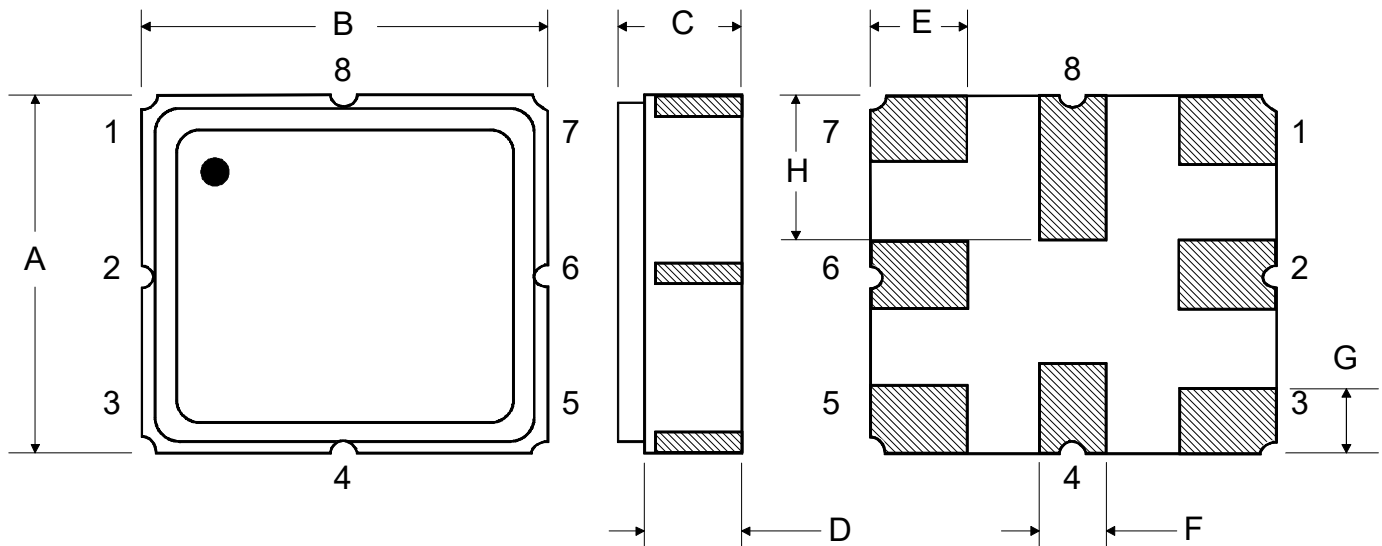
PCB Footprint Top View

Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	0.975	1.085	1.215	0.038	0.043	0.048
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.024	0.029
G	0.47	0.60	0.73	0.018	0.024	0.029
H	1.07	1.20	1.33	0.042	0.047	0.052
I		3.19			0.126	
J		0.81			0.032	
K		0.96			0.038	
L		0.81			0.032	
M		1.39			0.055	
N		0.23			0.009	
O		0.38			0.015	

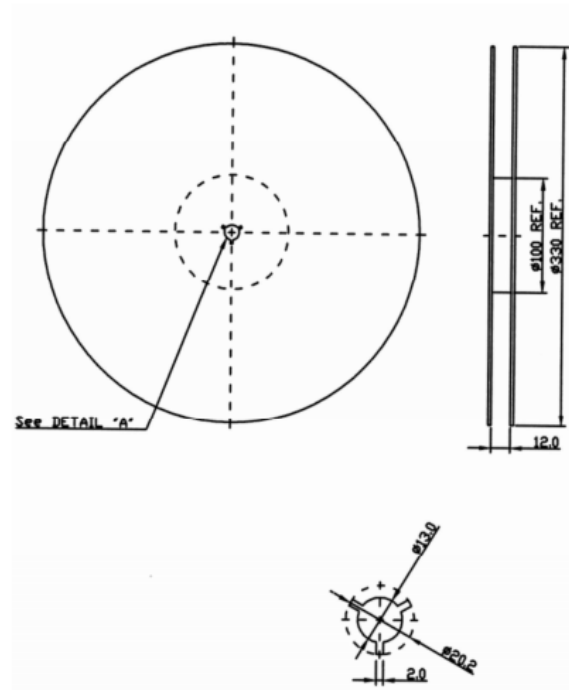
Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 μ m Gold over 1.27 to 8.89 μ m Nickel
Lid Plating	2.0 to 3.0 μ m Nickel
Body	Al ₂ O ₃ Ceramic
Pb Free	

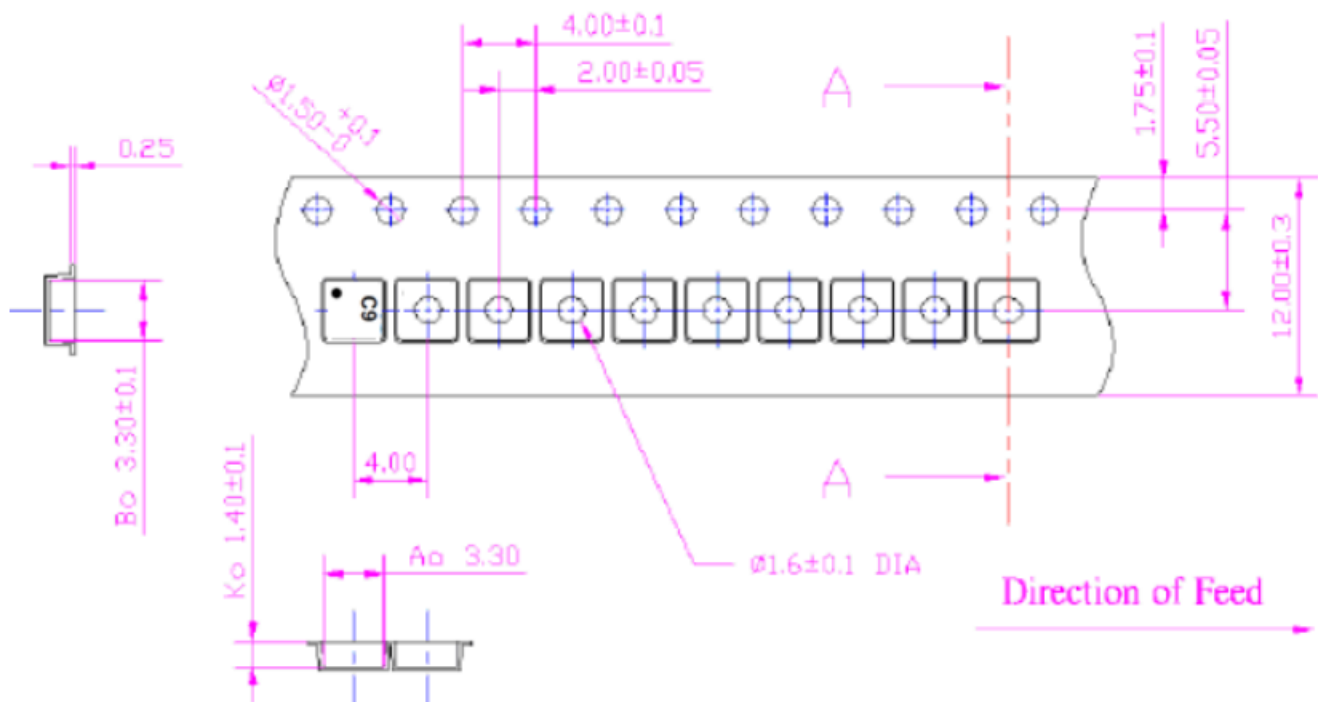


Reel Dimension

Tape and Reel Standard per ANSI/EIA-481

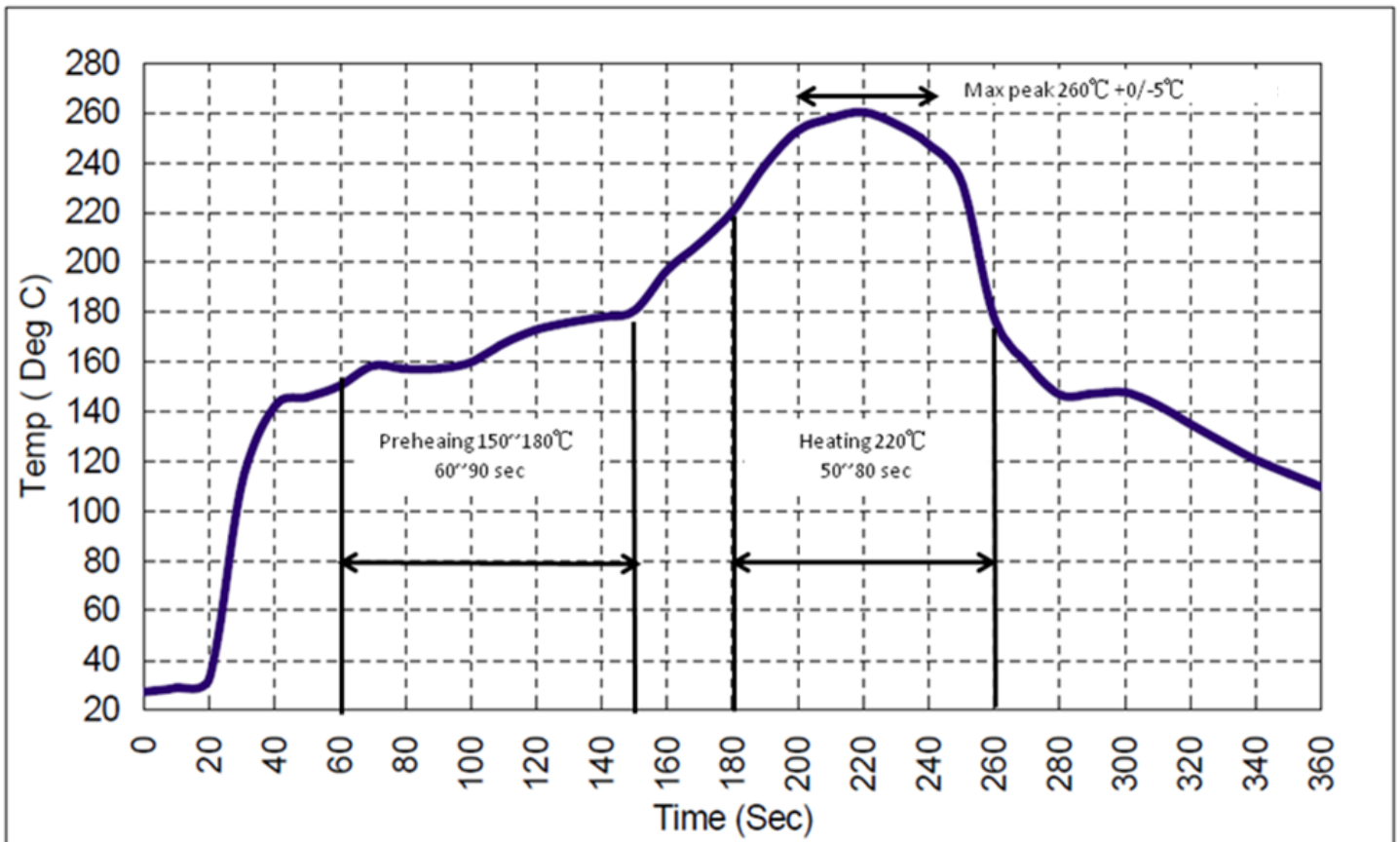


Tape Dimension



Recommended Reflow 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 (10 seconds).
4. Time: 5 times maximum.



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