

RSFP2312E

LTE Band 40(2300~2400MHz) Band Pass Filter



Description

RSFP2312E is a miniature filter designed for LTE Band40 application. RSFP2312E is designed with Film Bulk Acoustic Resonator (FBAR) technology. Typical insertion loss in the pass band is less than 2.4dB. Typical rejection at the WiFi and LTE41 band are more than 35dB.

Features

- ✧ For LTE-Band 40 Full band application
- ✧ Plastic Chip Scale Package(CSP)
- ✧ Miniature Size
 - 1.1 mm x 0.9 mm x 0.6 mm
- ✧ Low Insertion Loss
- ✧ High Rejection at WiFi and LTE41 bands
- ✧ High Power Handling: 2 W
- ✧ Low Temperature Coefficient of Frequency
- ✧ Excellent ESD protection ability
- ✧ Moisture Sensitivity: MSL3



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Electrical Specification

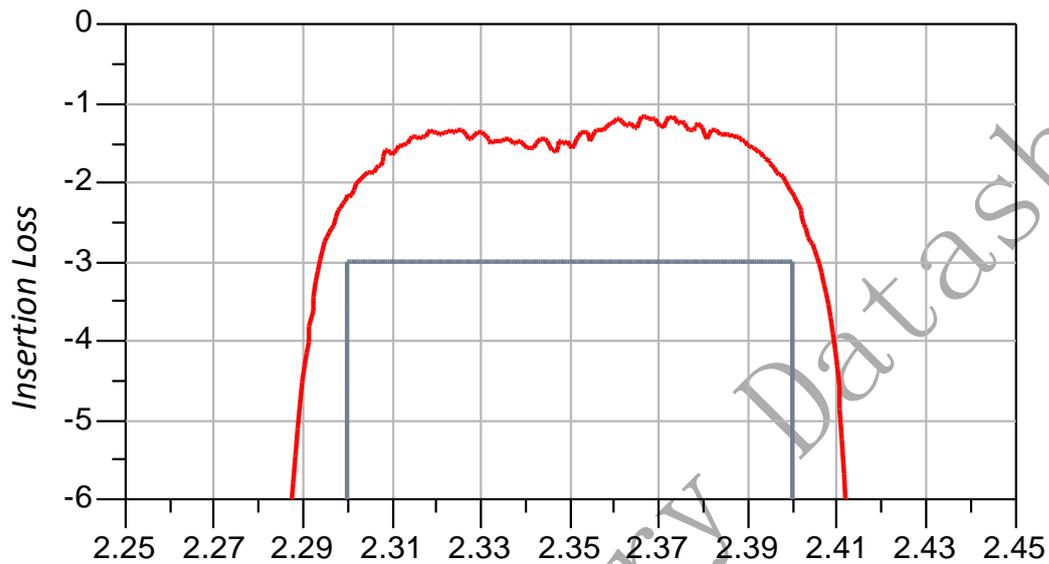
Test Temperature: 25°C

Parameter	Min	Typ	Max	Unit
Insertion Loss(2300~2310MHz)	\	1.8	2.6	dB
Insertion Loss(2310 ~ 2395 MHz)	\	1.5	2.4	dB
Insertion Loss(2395 ~ 2400 MHz)	\	2.1	3.0	dB
Ripple(2300 ~ 2310 MHz)	\	0.5	0.7	dB
Ripple(2310 ~ 2395 MHz)	\	0.8	1.0	dB
Ripple(2395 ~ 2400 MHz)	\	0.4	0.8	dB
Return Loss(2300~ 2400 MHz)	12	15	\	dB
Absolute Attenuation	\			
750 ~ 1577 MHz	25	38	\	dB
1577 ~ 1680 MHz	25	30	\	dB
1845~ 1880 MHz	24	28	\	dB
2110~ 2170MHz	25	28	\	dB
2420 ~ 2427 MHz	15	53	\	dB
2427~ 2460 MHz	45	60	\	dB
2460 ~ 2500 MHz	35	45	\	dB
4600 ~ 4800 MHz	35	45	\	dB
6900 ~ 7200 MHz	15	34	\	dB

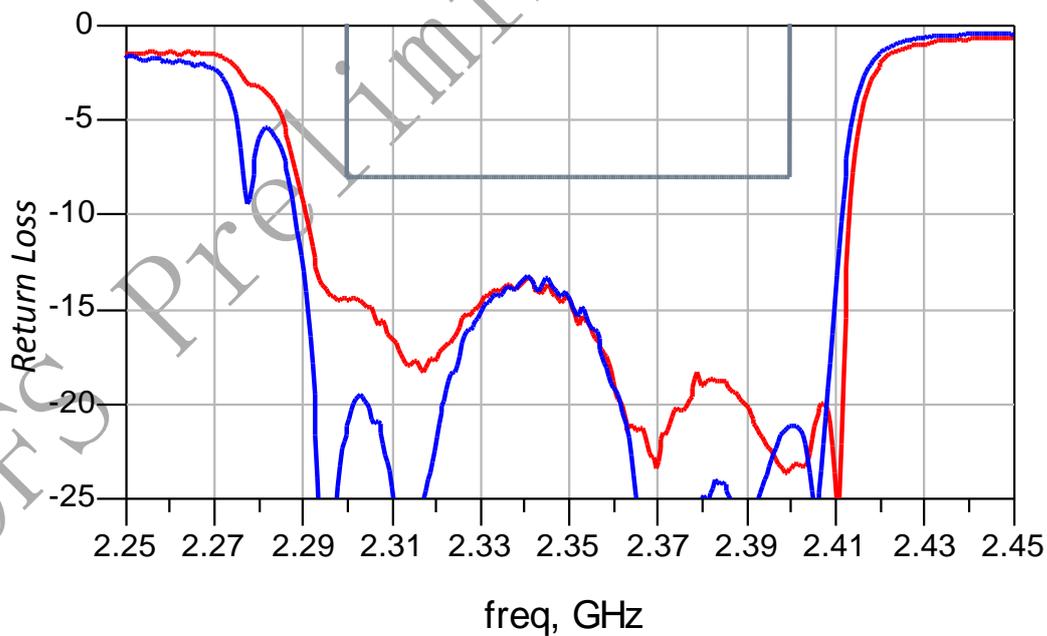
(1) **Typ Data** is the integrated value of the linear S-parameter over indicated band.

Typical Performance at $T_c=25^{\circ}C$

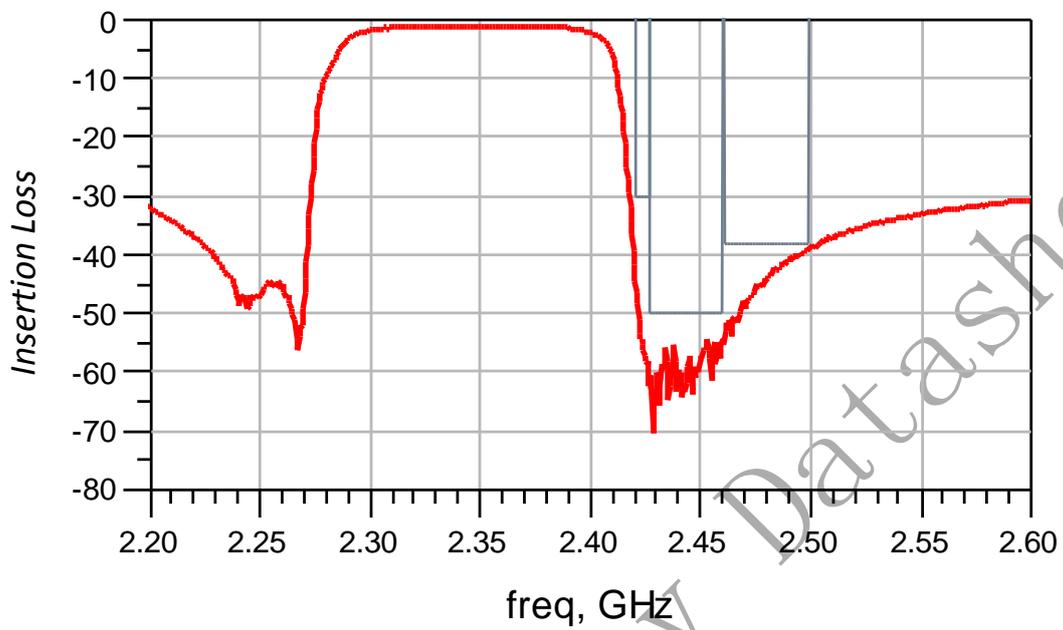
Passband Insertion Loss



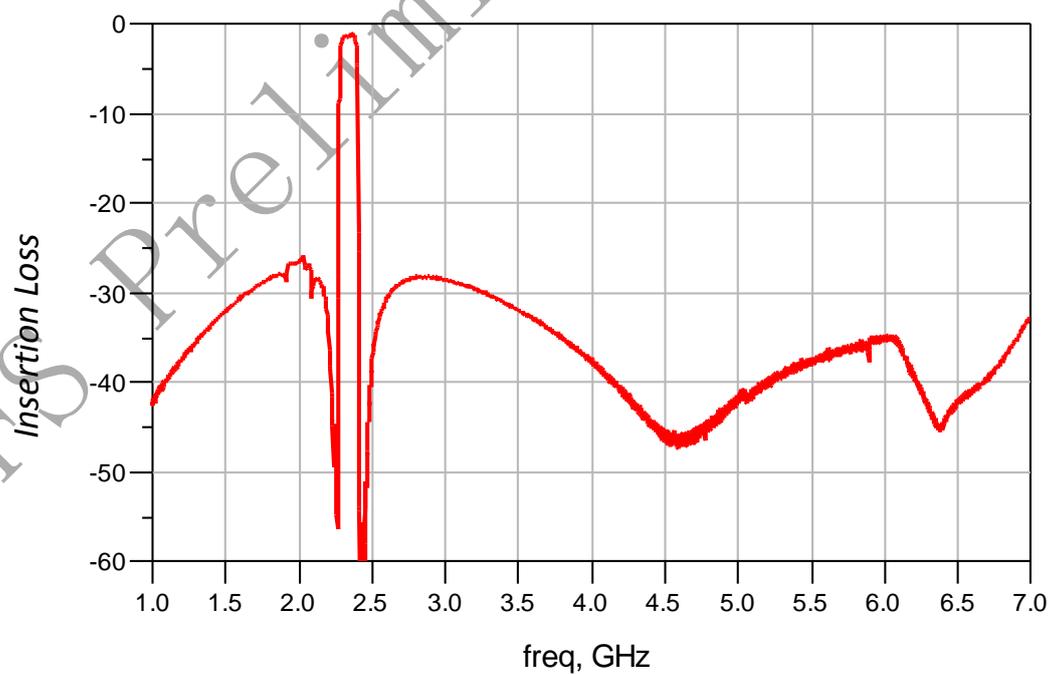
Passband Return Loss



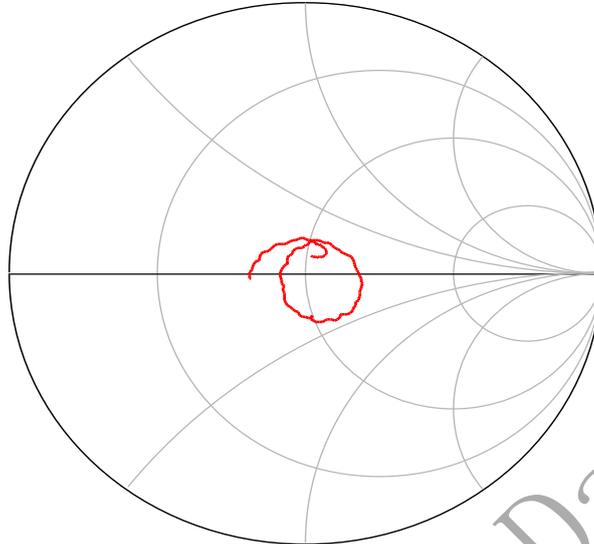
Narrowband Insertion Loss



Wideband Insertion Loss

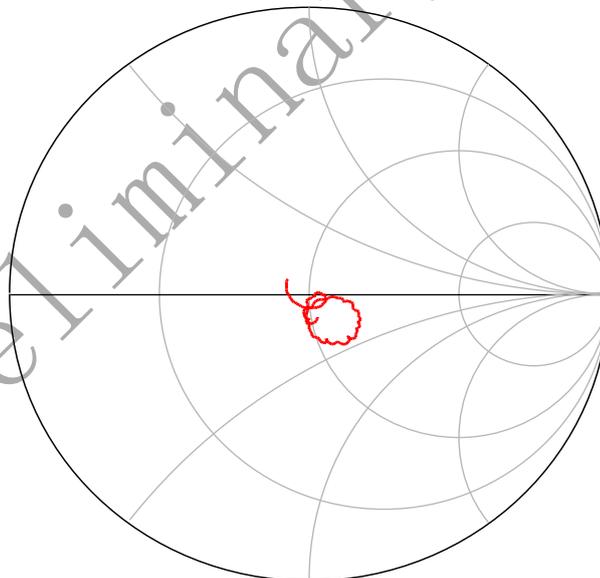


Input Smith Chart S11



freq (2.300GHz to 2.400GHz)

Output Smith Chart S22

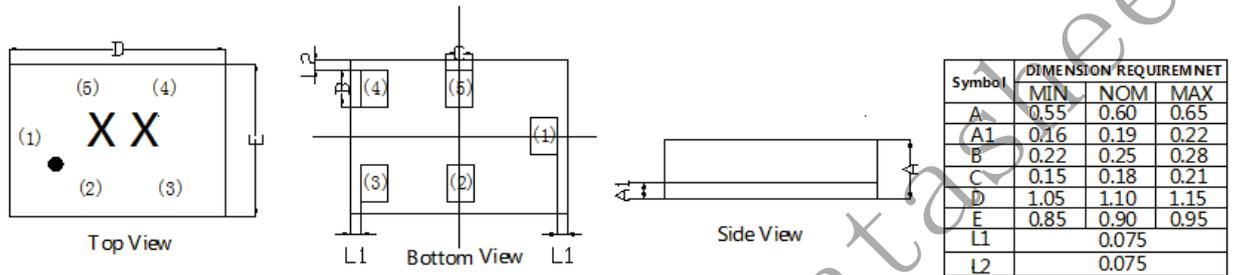


freq (2.300GHz to 2.400GHz)

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Package Outline



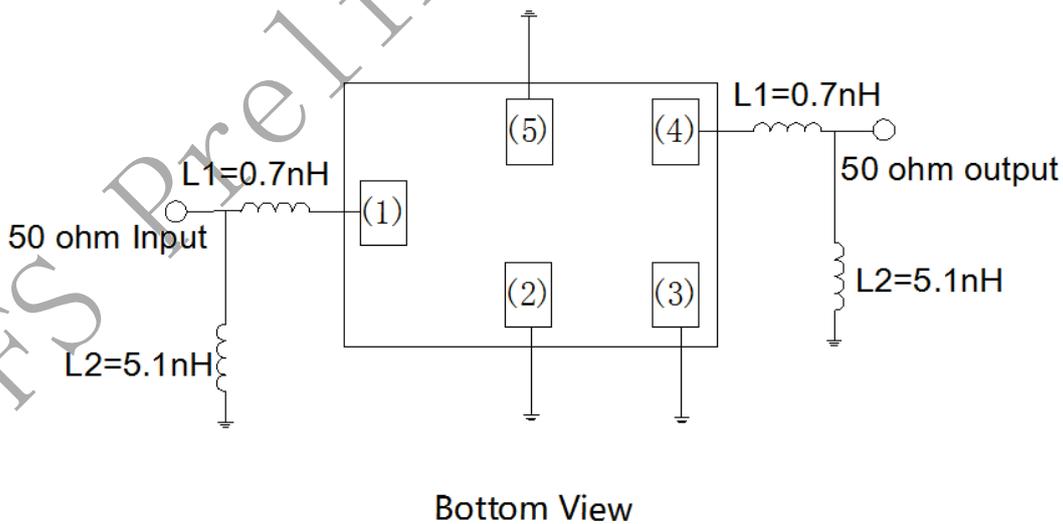
Notes:

- 1: Dimension: mm
- 2: Dimensions nominal unless otherwise noted
- 3: Contact area are gold plated
- 4: Pad (1) to (5) are same size
- 5: X X is ROFS inside code

Pin connection:

- 1 Input
- 4 Output
- 2,3,5 Ground

Test Circuit

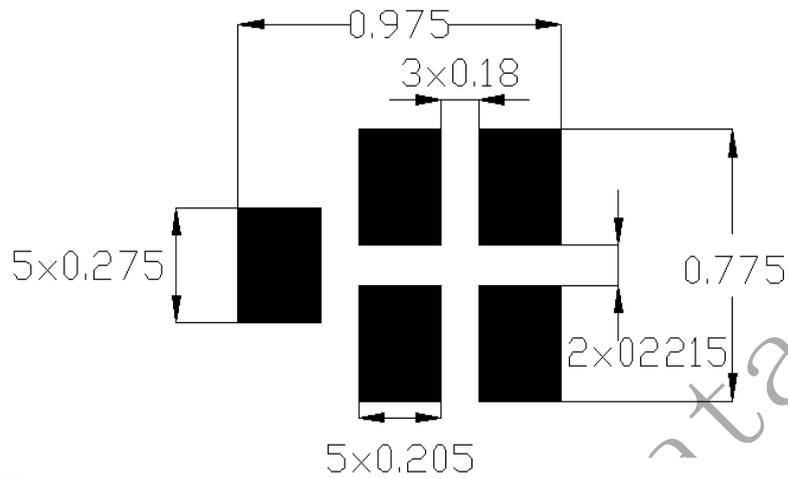


Notes: Matching component values shown are ROFS evaluation board result, please adjust component values by the actual use environment.

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PCB FootPrint

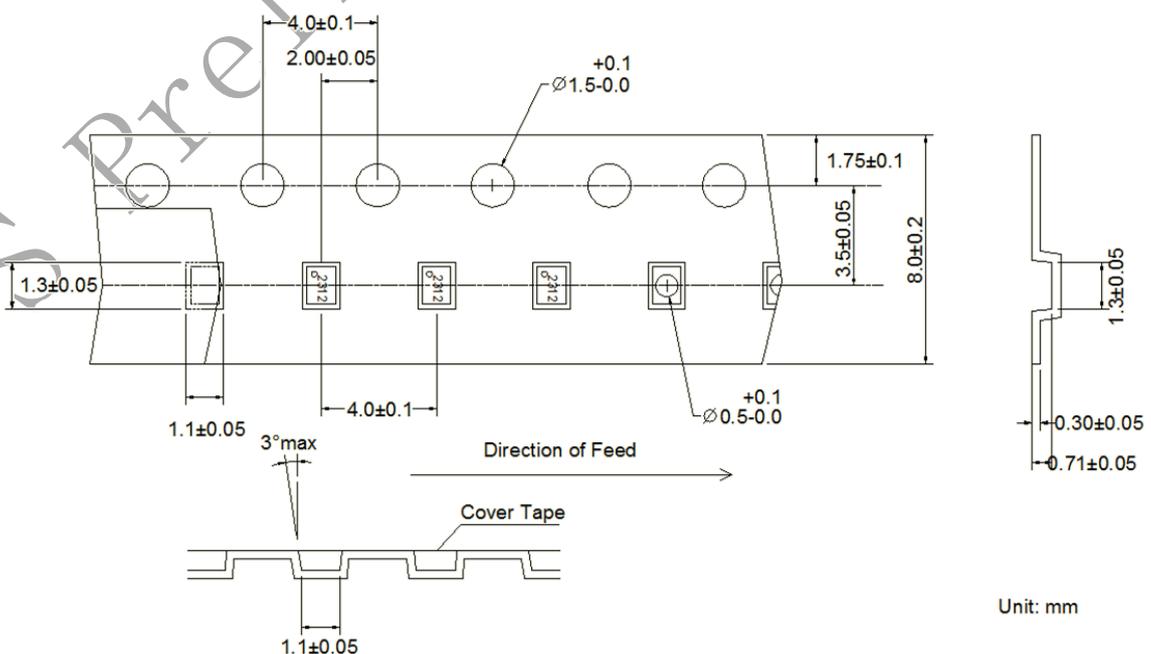


NOTE:

1. Black indicates metallized area.
2. This footprint represents a recommendation only, some modification may be necessary to suit end user assembly materials and processes.
3. For solder pad recommendation see mechanical information.
4. Dimensions shown are nominal in millimeters.

Packing

1. Tape Dimension



Unit: mm

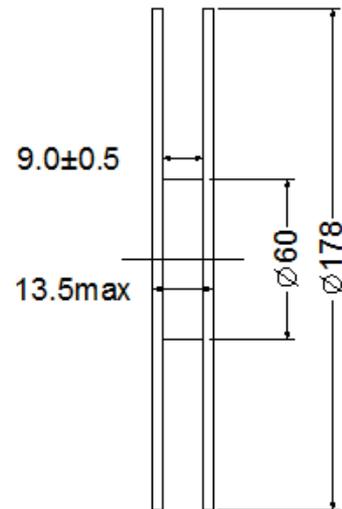
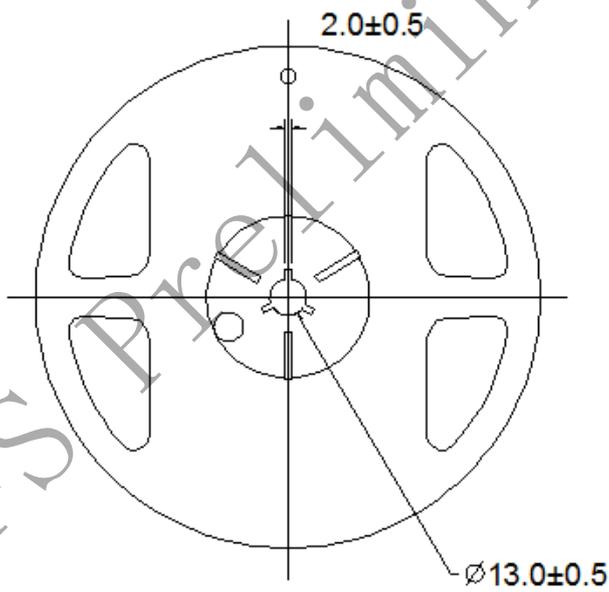
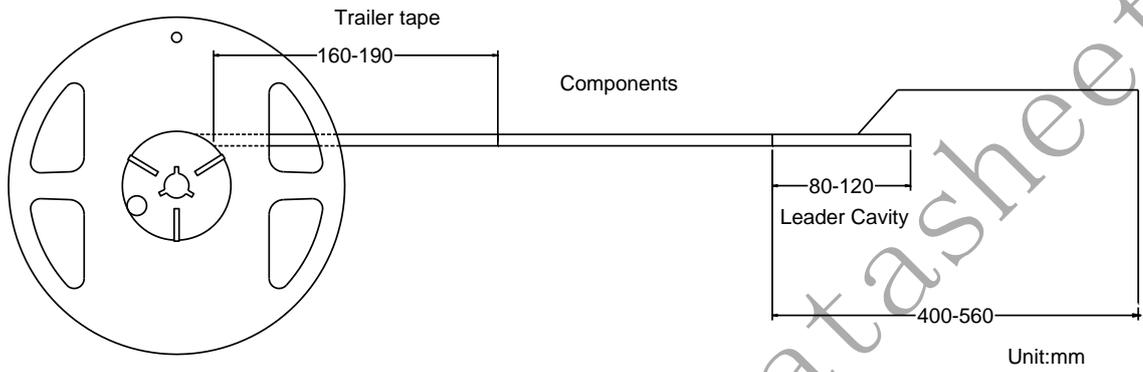
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2. Reel Dimension

5000Pcs/Reel



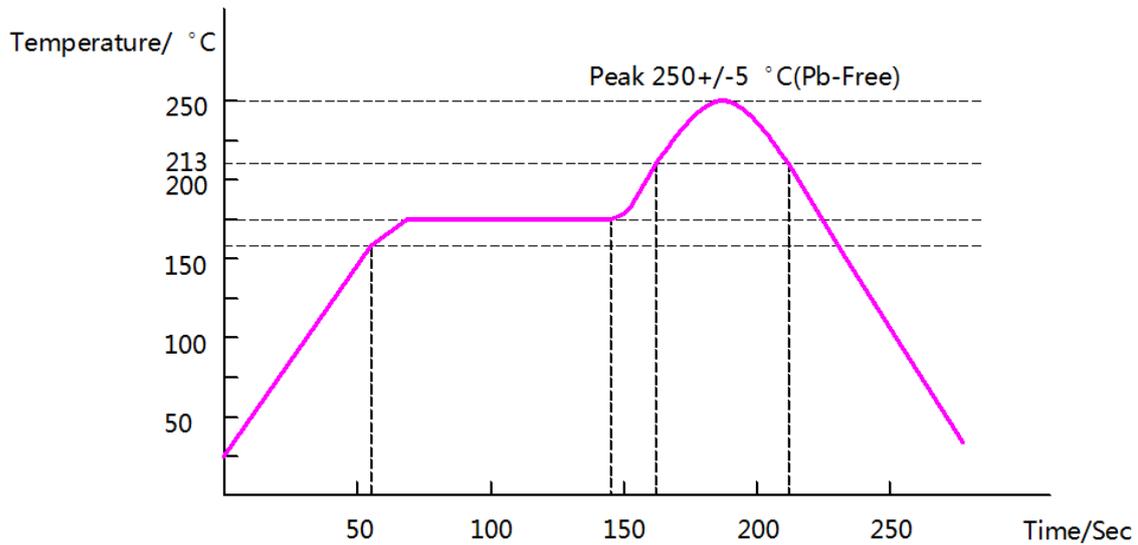
Unit: mm

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Recommended IR Reflow Profile



Order Information

Part Number	Qty Per Reel	Container
RSFP2312E	5000	7 inch Reel

For more information, please contact: sales@rofsmicro.com

Notes:

The specification may be changed or the product had been discontinued, please check with our sales or product engineer before order.