



RFM Integrated Device, Inc.

PRODUCT SPECIFICATION

Part Number: CDR4008

Description:
DR FILTER, WiFi 5/ WiFi 6,
6525 MHz, BW 1200, IL 4.5

Preliminary

1. Features

- 1-1. High Rejection and Low Insertion loss
- 1-2. Dimensions 9.36x3.89x2.4 mm
- 1-3. Maximum input power 1.0W max.
- 1-4. MSL2a



2. Applications

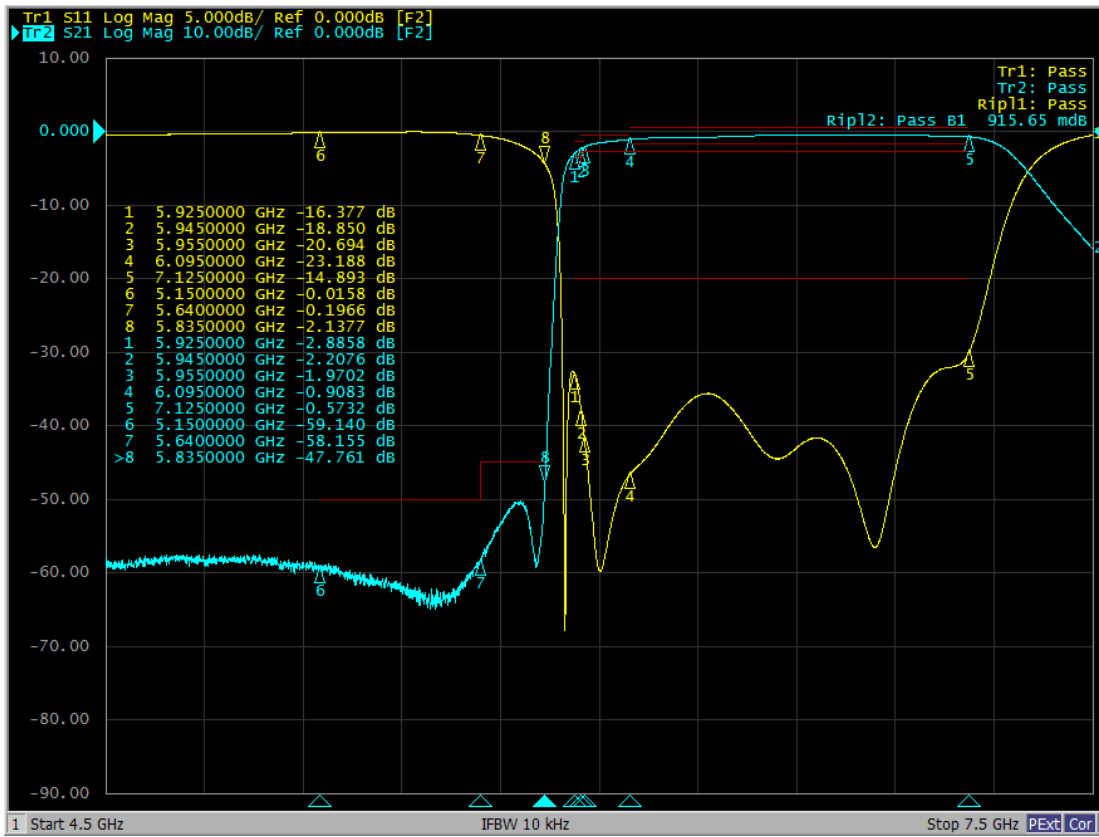
- 2-1. 5925 ~ 7125 MHz working frequency.

3. Electrical Characteristics

3-1. Specification table

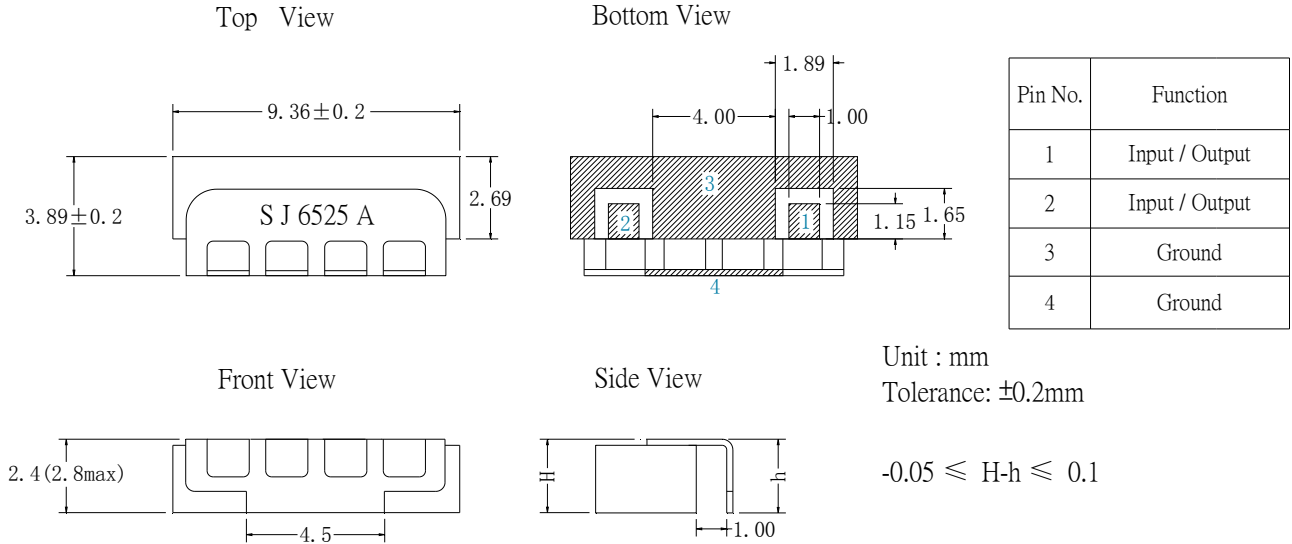
ITEM	Frequency	SPECIFICATION		
		Min.	Typ.	Max.
Center Frequency (MHz)	6525			
Bandwidth (MHz)	1200 (5925~7125)			
Passband Insertion Loss (dB)	5925~5945MHz		3.5	4.5
	5945~5955MHz		2.5	3.0
	5945~5955MHz(105°C)		2.8	3.3
	5955~7125MHz		2.3	2.7
	5955~7125MHz(105°C)		2.7	3.2
Passband Ripple (dB)	5925~5955MHz		1.8	2.0
	5945~6095MHz		1.6	2.2
	6095~7125MHz		1.5	2.3
Passband Return Loss (dB)	5150~5835	9.6	11	
Attenuation (dB)	5150~5640MHz	50	55	
	5640~5835MHz	45	48	
	5640~5835MHz(105°C)	43	46	
Normal Impedence (Ω)	50			
Operation Temperature (°C)	-40 ~ +105			
Input Power (W)	1.0 max.			

3-2. Characteristic curve

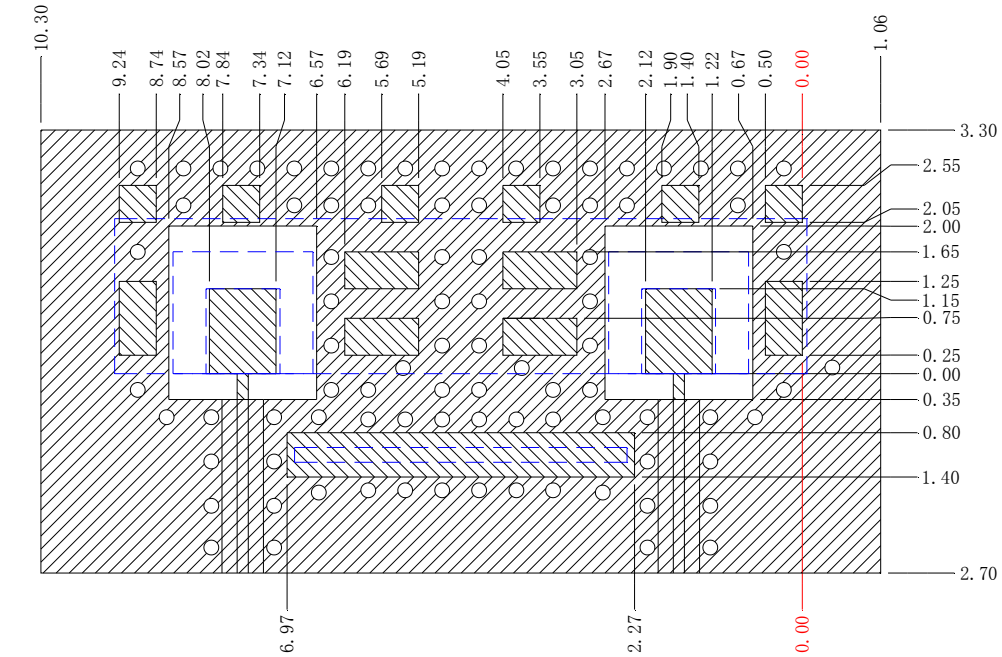


4. Dimension and Recommended PCB Land pattern

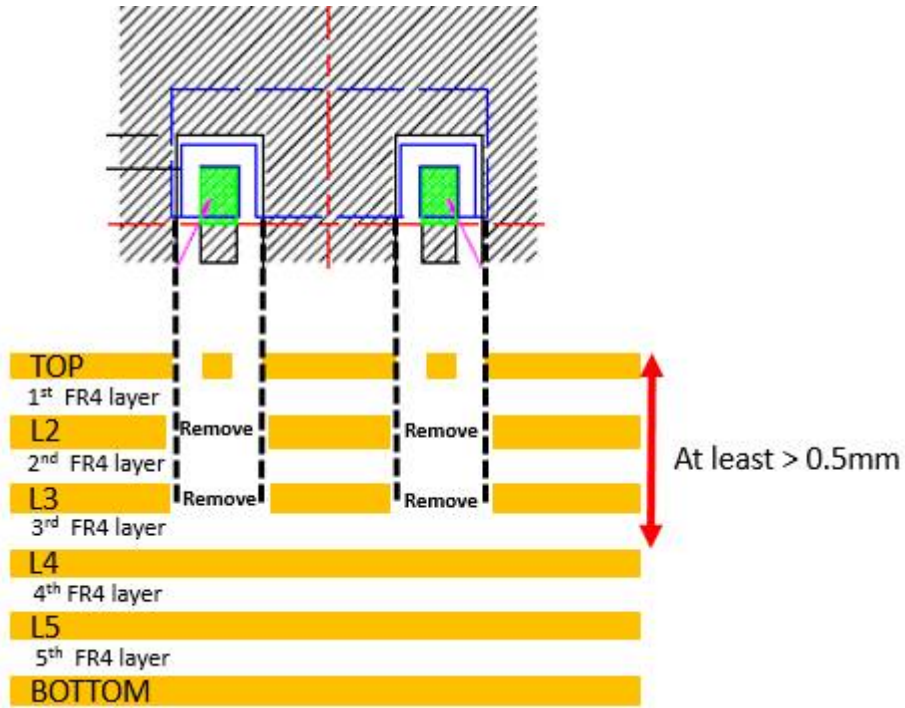
4-1. Dimension



4-2. Recommended PCB Land Pattern

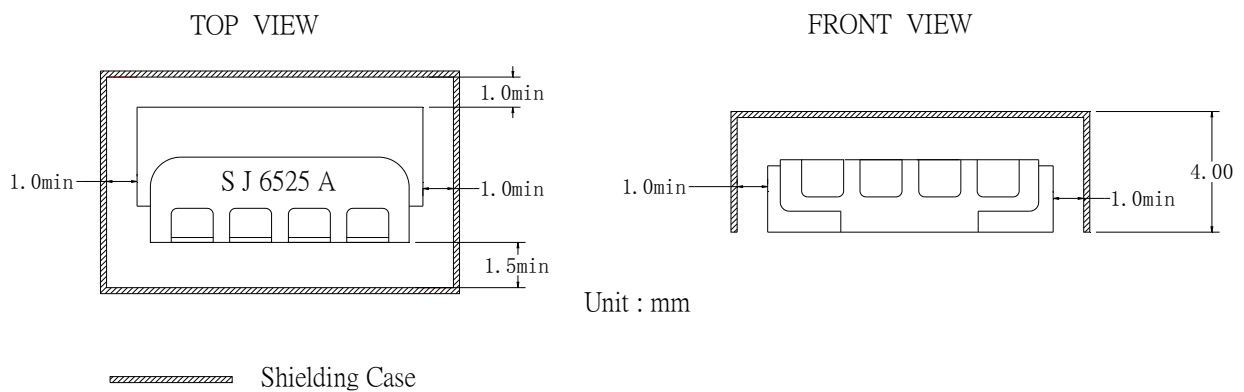


5. Recommended PCB stacking



Note: Suggest that distance of I/O pad reference GND at least > 0.5mm, so need remove L2 to L3 conductor layer.

6. Recommended shielding case layout guide



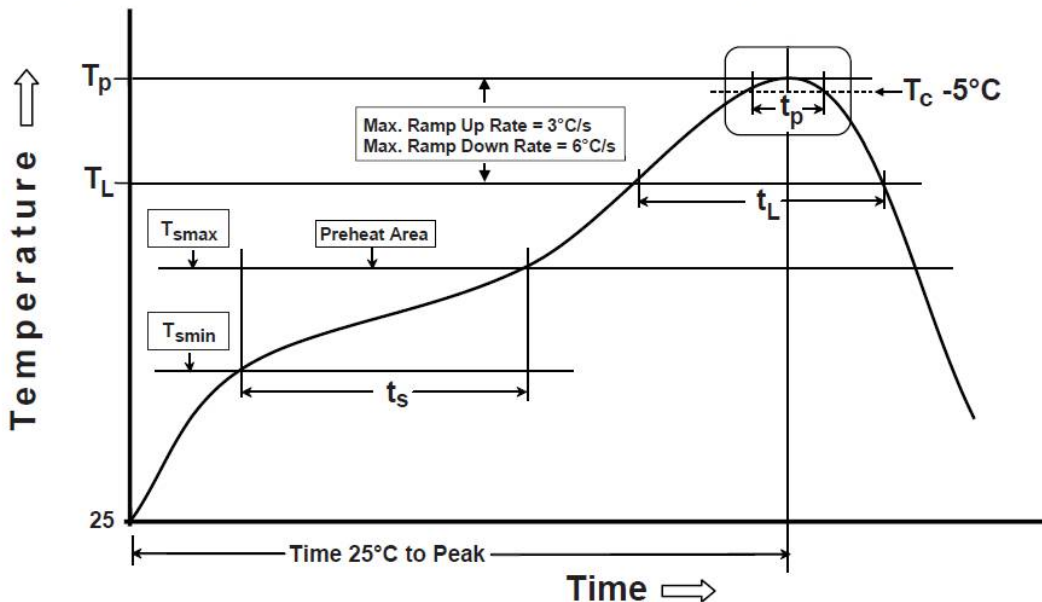
7. Reflow Soldering Standard Condition

The products can be assembled following Pb-free assembly. According to the Standard IPC/JEDEC J-STD-020C, the temperature profile suggested is as follow:

Phase	Profile features	Pb-Free Assembly (SnAgCu)
PREHEAT	-Temperature Min(T_{smin}) -Temperature Max(T_{smax}) -Time(t_s) form (T_{smin} to T_{smax})	150°C 200°C 60-180 seconds
RAMP-UP	Avg. Ramp-up Rate (T_{smax} to TP)	3°C/second max
REFLOW	-Temperature(T_L) -Total Time above T_L (t_L)	217°C 60-150 seconds
PEAK	-Temperature(T_P) -Time(t_p)	260°C 20-40 second
RAMP-DOWN	Rate	6°C/ second max
Time from 25°C to Peak Temperature		8 minutes max
Composition of solder paste		96.5Sn/3Ag/0.5Cu
Solder Paste Model		SHENMAO PF606-P26

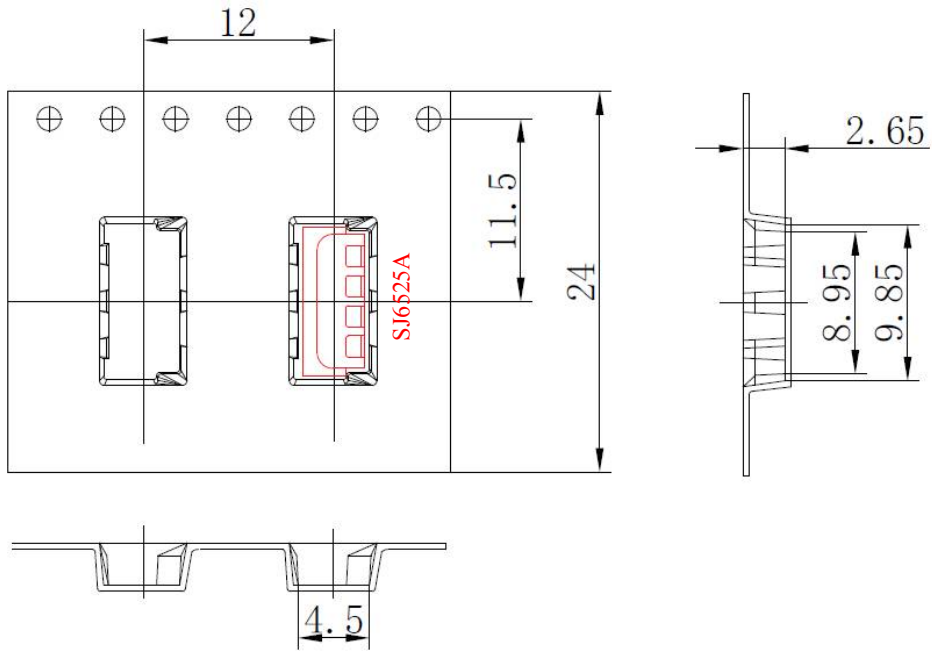
Note : All the temperature measure point is on top surface of the component, if temperature over recommend, it will make component surface peeling or damage.

The graphic shows temperature profile for component assembly process in reflow ovens



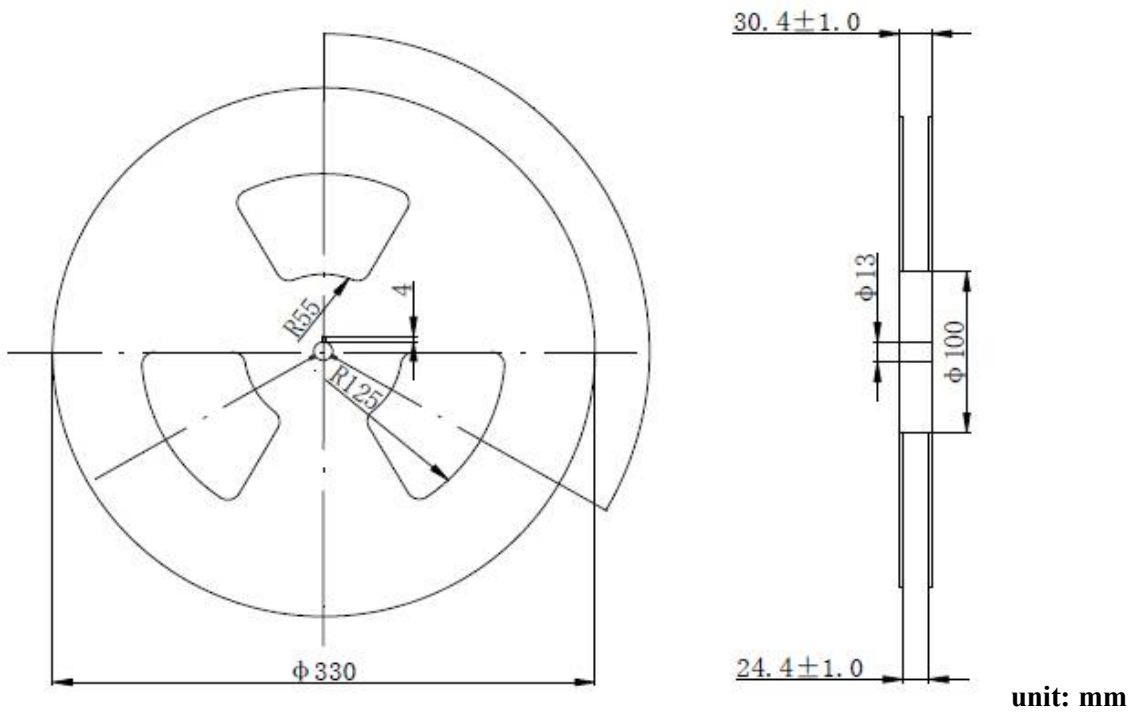
8. Packaging and Dimensions

8-1 Dimensions of Carrier Tape



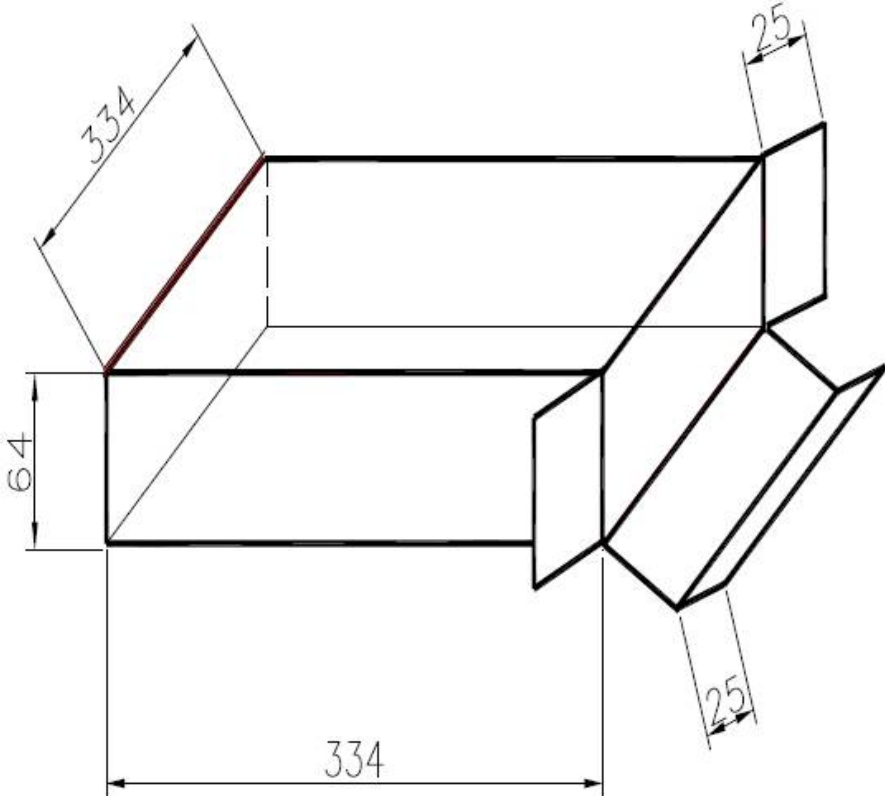
unit: mm

8-2. Dimensions of Reel (2000pcs/ Reel)



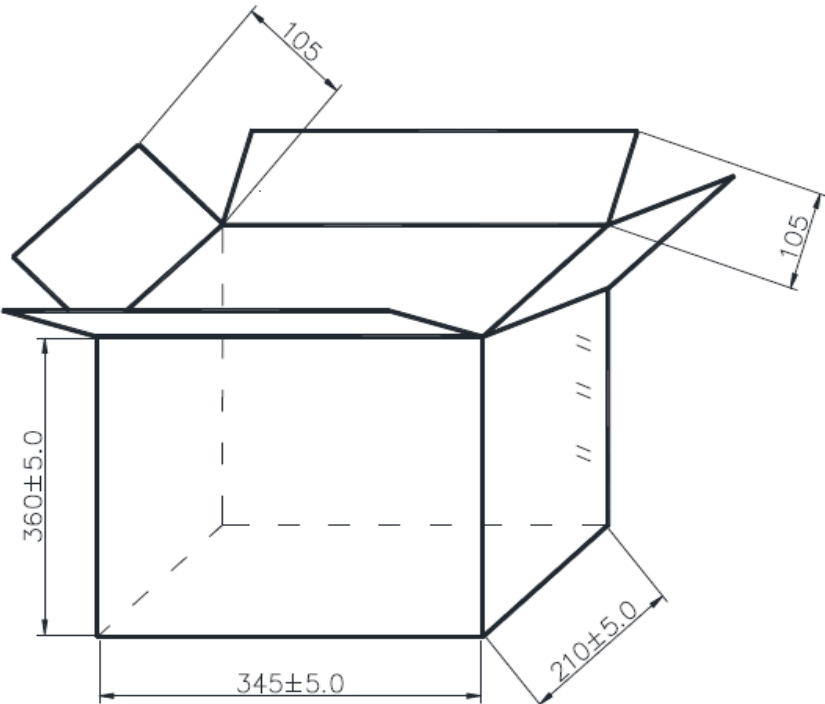
unit: mm

8-3. Dimensions of Inner Carton (2Reel/ Inner Carton)



unit: mm

8-4. Dimensions of Outer Carton (3 Inner Carton / Outer Carton)



unit: mm