

WEIDY[®]

No.

APS-1608-006

Version

A/1

Date

2016-8-03

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Box-type metallized polyester film capacitor

Datasheet for film capacitor W23

Customer

WEIDY PART NO	Product specification	CUSTOMER'S PART NO.
W232J103KJ6L00AG0W	CL21B-630V-103K-P7.5	

Seller

Approval	
Date	7/7/2021
Ratify	Tao Wentao
Audit	Chen Haiyong
Maker	Wen Xin

Buyer

Approval	
Date	
Ratify	
Title	
Remark	Pls send copy to us after approval

Company information

Company name : Shenzhen Weidy Industrial Development Co.,Ltd
Company Address : 5/F, New Asia Electronic Town, Zhenzhong Rd, Futian, Shenzhen, Guangdong, China.
TEL:0755-82811688 FAX: 0755-82812688 <http://www.weidy.net>
Factory Address : No8,Songyin Rd., Pingshan Community, Tangxia

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③ Rated capacitance value(Digit 6 to 8)

According to JIS

101=10x10 ¹ pF=0.1nF	102=10x10 ² pF=1.0nF= 0.001uF	103=10x10 ³ pF=10nF=0.01uF
104=10x10 ⁴ pF=100nF=0.1uF	105=10x10 ⁵ pF=1000nF=1uF	106=10x10 ⁶ pF=10000nF=10Uf
107 =100uF	108 =1000uF	109 =10000uF

④ Capacitance tolerance (Digit 9)

Tolerance	± 1%	± 2%	± 3%	± 5%	±10%	±15%	± 20%	0~+10%	0~-10%		
Code	F	G	H	J	K	L	M	T	P		

⑤ Pitch/ Length of Axial products (Digit 10)

Pitch	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	10.0	12.5	15.0	20.0
Code	A	B	C	D	E	F	G	H	J	K	L	M	N
Pitch	22.0	22.5	25.0	27.0	27.5	30.0	31.0	32	37	26	8		
Code	P	Q	R	S	T	U	V	W	X	Y	1		
Pitch	15	19	21	27	32	37	42	46	24	50	56		
Code	1	2	3	4	5	6	7	8	9	A	B		

*When the products are axial products, it stands for the length of the products

⑥ Lead (Digit 11)

Lead	CP 0.5	CP 0.6	CP 0.7	CP 0.8	CU 1.0	CU 0.8	CU 0.7	CU 1.2	CP 1.0	CU 0.6	
code	5	6	7	8	1	9	4	A	C	3	

⑦ Package type and code of Lead Configuration(Digit 12)

Code	Remarks
S	Straight leads, lead Cut (L≤8mm)
M	Straight leads, lead Cut (20mm>L>8mm)
L	Straight leads, lead Cut (L≥20mm)
W	Leads bent into 90 Degree
K	Forming lead(tolerance of lead length±0.5mm)
Y	Forming lead(tolerance of lead length±0.3mm)
T	Taping packing

⑧ Internal use (Digit 13 ~ 18)

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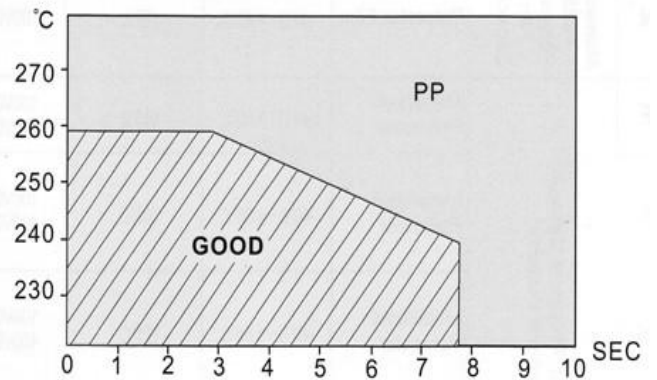
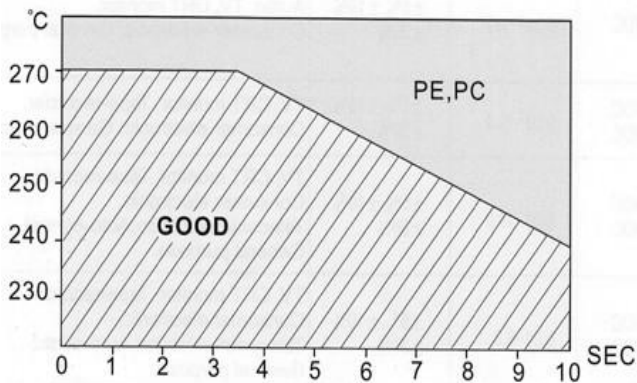
Soldering heat IEC 68-2-20	Soldering temperature : $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Immersion duration : $10\text{s} \pm 1\text{s}$ Dip depth from the mounting surface $2+0/-0.5\text{mm}$, using the thickness of $1.5\text{mm} \pm 0.5\text{mm}$ insulation shielding plate Capacitance change : $\Delta C/C : \leq \pm 2\%$ DF change : $\tan \delta : \leq 0.3\%$ at 1 KHZ											
Temperature Cycling IEC 68-2-14	Temperature: $\theta A = -55^{\circ}\text{C}$; $\theta B = +125^{\circ}\text{C}$ Time duration : 30min ; Cycle times : 5次 ; Cycle times Capacitance change : $\Delta C/C : \leq \pm 5\%$ DF change : $\tan \delta : \leq 0.3\%$ at 1 KHZ Insulation Resistance: $\geq 50\%$ of the value before test											
Vibration IEC 68-2-6	Frequency : 10 ~ 500Hz Direction and Duration: Per direction 2hrs , Total 6hrs ; Amplitude 0.75mm OR acceleration 98m/s^2 (Taking the severity of lower) No visible damage and deterioration in appearance											
Bump IEC 68-2-29	Bump times : 4000 times Acceleration : 390m/s^2 Pulse duration : 6ms No visible damage and deterioration in appearance											
Climatic Sequence	<table border="1"> <tr> <td style="text-align: center;">Dry heat IEC 68-2-2</td> <td> Temperature : $+125^{\circ}\text{C}$ Duration : 16h </td> </tr> <tr> <td style="text-align: center;">Damp heat cycle</td> <td>Test Db, Severity b, the first cycle</td> </tr> <tr> <td style="text-align: center;">Cold IEC 68-2-1</td> <td> Temperature : -55°C duration : 2h </td> </tr> <tr> <td style="text-align: center;">Low Air pressure IEC 68-2-13</td> <td> Temperature : $15^{\circ}\text{C} - 35^{\circ}\text{C}$ Pressure : 8.5KPa Duration : 1h apply UR at the last 1 minute. </td> </tr> <tr> <td style="text-align: center;">Damp heat cycle IEC 68-2-30</td> <td>Test Db, Severity b, the other cycles, apply UR for 1minute after the test finished.</td> </tr> </table>	Dry heat IEC 68-2-2	Temperature : $+125^{\circ}\text{C}$ Duration : 16h	Damp heat cycle	Test Db, Severity b, the first cycle	Cold IEC 68-2-1	Temperature : -55°C duration : 2h	Low Air pressure IEC 68-2-13	Temperature : $15^{\circ}\text{C} - 35^{\circ}\text{C}$ Pressure : 8.5KPa Duration : 1h apply UR at the last 1 minute.	Damp heat cycle IEC 68-2-30	Test Db, Severity b, the other cycles, apply UR for 1minute after the test finished.	No breakdown or flashover ; No visible damage and deterioration in appearance and the marking shall be legible Capacitance change : $\Delta C/C : \leq \pm 5\%$ DF change : $\Delta \tan \delta : \leq 0.3\%$ at 1 KHZ . Insulation Resistance : $\geq 50\%$ of the value before test
Dry heat IEC 68-2-2	Temperature : $+125^{\circ}\text{C}$ Duration : 16h											
Damp heat cycle	Test Db, Severity b, the first cycle											
Cold IEC 68-2-1	Temperature : -55°C duration : 2h											
Low Air pressure IEC 68-2-13	Temperature : $15^{\circ}\text{C} - 35^{\circ}\text{C}$ Pressure : 8.5KPa Duration : 1h apply UR at the last 1 minute.											
Damp heat cycle IEC 68-2-30	Test Db, Severity b, the other cycles, apply UR for 1minute after the test finished.											

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Damp Heat Test
IEC 68-2-3

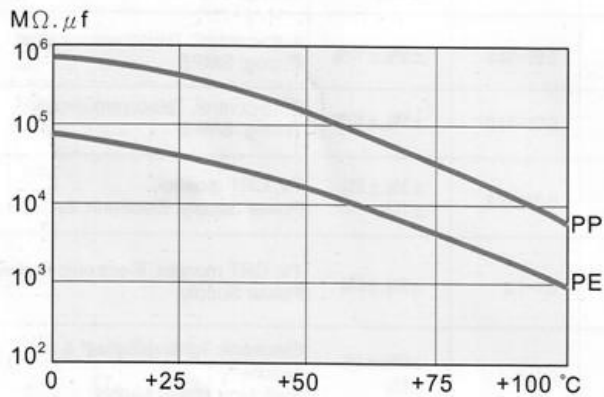
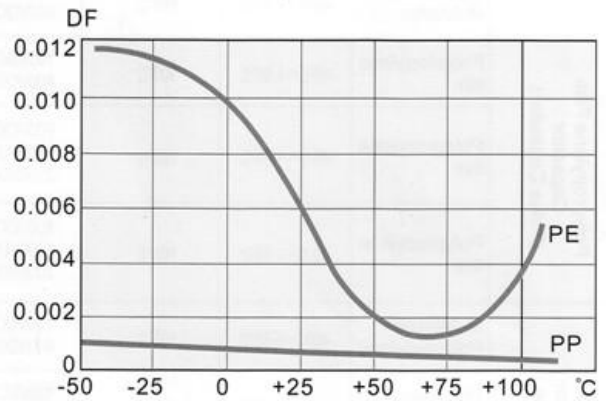
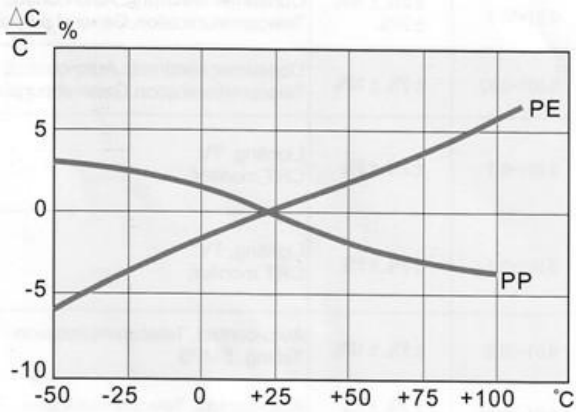
Temperature : $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$
Humidity : $93 \pm 2/-3 \%$
Duration : 21 days
No visible damage and deterioration in appearance and the marking shall be legible
Capacitance change : $\Delta C/C : \leq \pm 5\%$
DF Change : $\tan \delta : \leq 0.5\%$ at 1 KHZ
Insulation Resistance: $\geq 50\%$ of the value before test

❖ Soldering Temperature VS Time



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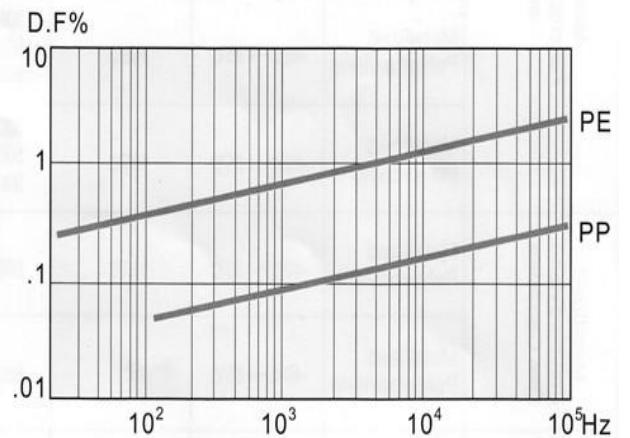
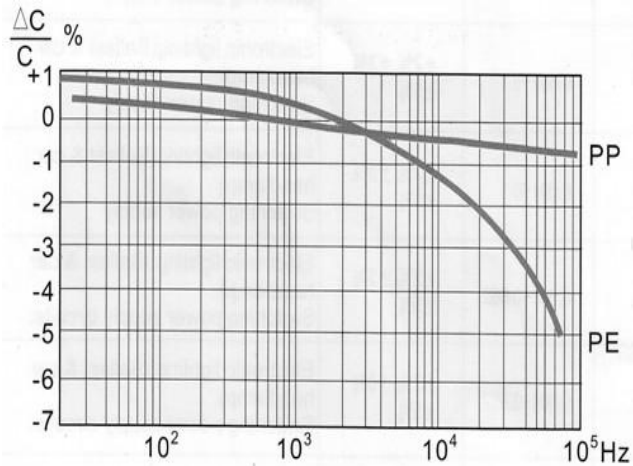
✧ Temperature Characteristics



PP: 聚丙烯薄膜 (Polypropylene Film)

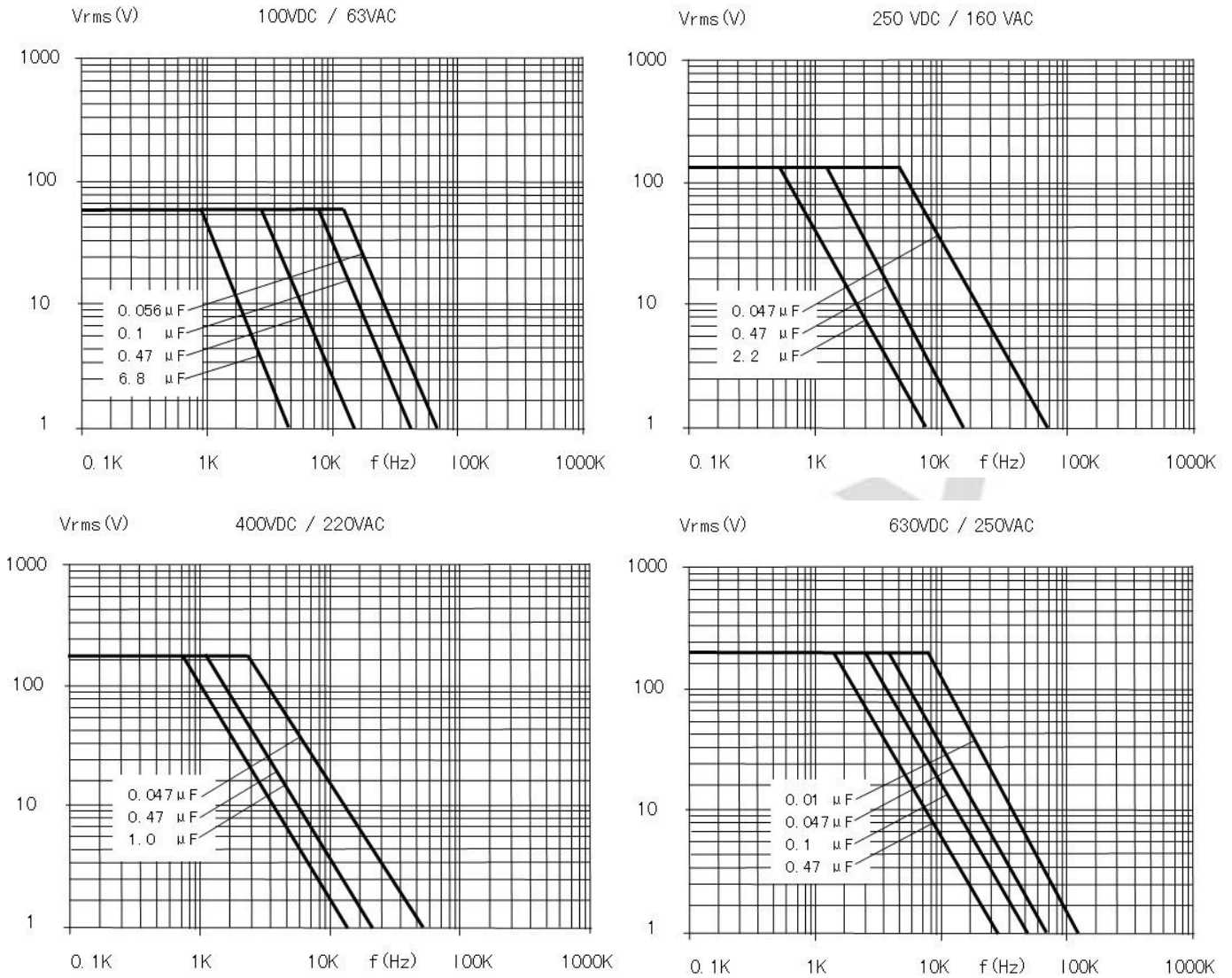
PE: 聚酯薄膜 (Polyester Film)

✧ Frequency Characteristics



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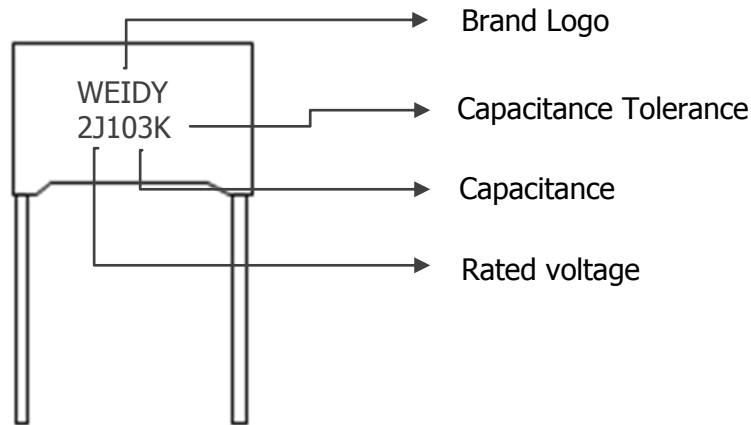
✧ Permissible AC Voltage VS Frequency Curve



Remark : Sine wave , Environmental temperature $\leq 85^{\circ}C$

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✧ Marking Specification



✧ Taping Drawing & Dimensions

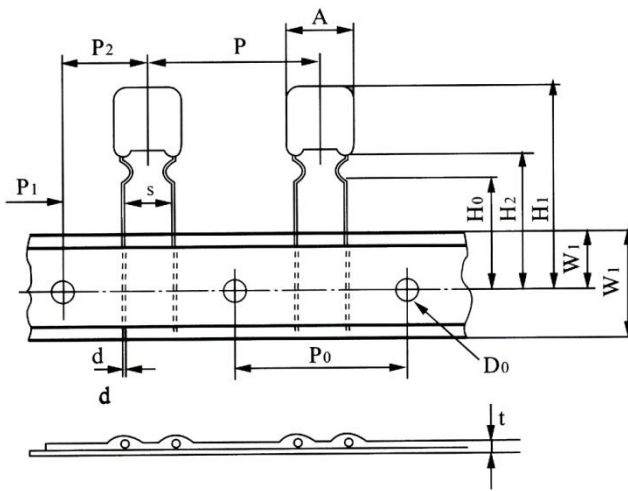


Fig.1

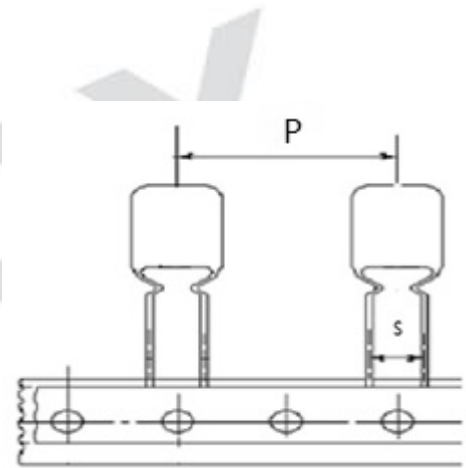
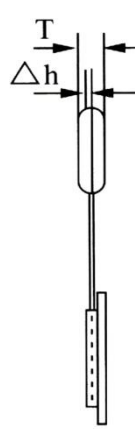


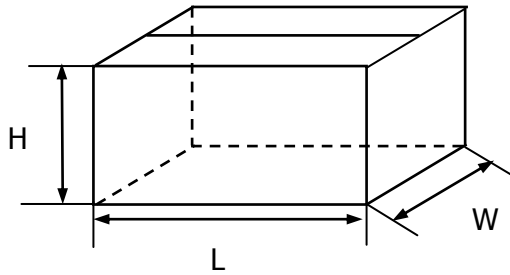
Fig.2

Technique Data	Code	(mm) Size					Technique Data	Code	(mm) Size				
		P=5	P=7.5	P=10	P=15	Tolerance			P=5	P=7.5	P=10	P=15	Tolerance
Taping Type		Fig1	Fig1	Fig2	Fig2		Taping Type		Fig1	Fig1	Fig2	Fig2	
Section distance	P	12.7	12.7	25.4	25.4	±1.0	Tape width	W	18.0	18.0	18.0	18.0	±0.5
Distance between two hole	P0	12.7	12.7	12.7	12.7	±0.3	Jack position	W1	9.0	9.0	9.0	9.0	±0.5
Leads position	P1	3.85	2.6	7.7	5.2	±0.7	Bending height	H0	16	16	16	16	±0.5
Pitch for forming type	S	5.0	7.5	10.0	15.0	±0.5	Upper size	H1	39	39	39	39	max
Body position	P2	6.35	6.35	12.7	12.7	±1.3	Dia. Of the hole	D0	4.0	4.0	4.0	4.0	±0.3
Product Inclination	Δh	0	0	0	0	±0.2	Tape thickness	t	0.7	0.7	0.7	0.7	±0.2

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◇ Carton Size

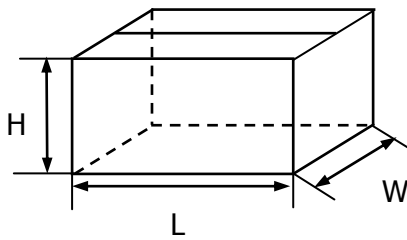


Out packaging box for bulk

L: 480mm

W: 320mm

H: 280mm

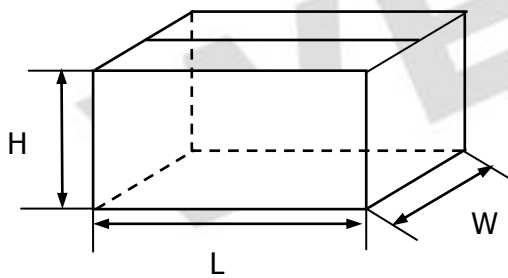


Inner packing box for bulk

L: 280mm

W: 225mm

H: 120mm

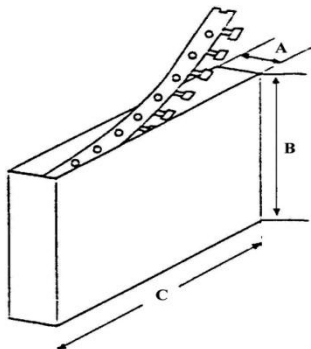


Out packaging box for taping

L: 640mm

W: 360mm

H: 290mm



Inner packing box for taping

A: 50mm

B: 320mm

C: 330mm