

## ■ Features

- SMD construction, and low profile.
- High Impedance and Excellent Frequency Characteristic.
- Self Electromagnetic Shielding.
- Low Magnetic Flux Leakage.
- Operating temperature: -40°C to +105°C (Contain Heating coil)

## ■ Applications

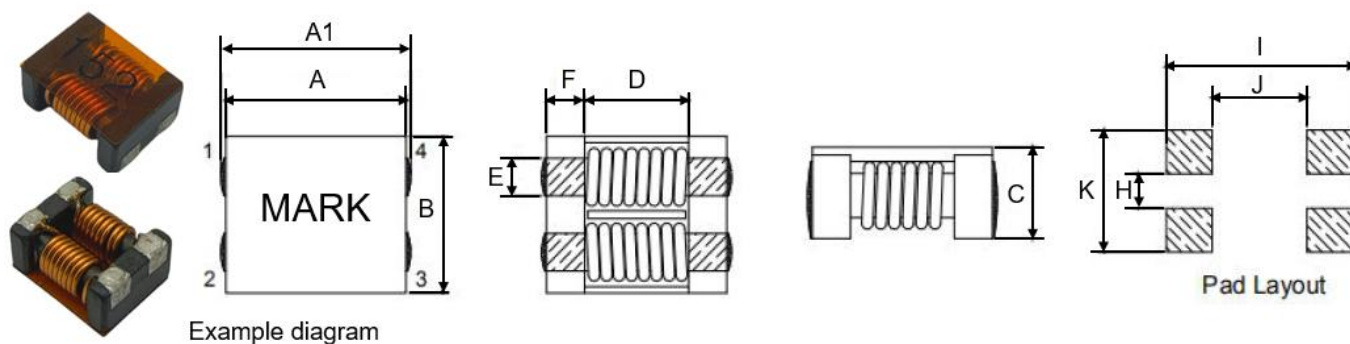
- LED Light, TV game, Monitor, etc.
- EMI common-mode noise.

## ■ Product Identification

**YLCM**    □□□□□ - □□□    □  
 (1)                      (2)                      (3)                      (4)

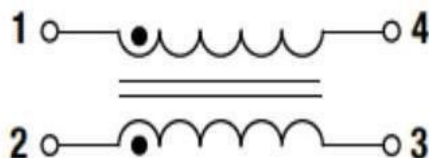
- (1) : Type
- (2) : Dimensions
- (3) : Impedance
- (4) : Taping

## ■ Shapes and Dimensions (Unit: mm)



| TYPE      | A       | A1      | B       | C<br>Max. | D<br>Typ. | E<br>Typ. | F<br>Typ. | K<br>Typ. | H<br>Typ. | I<br>Typ. | J<br>Typ. |
|-----------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| YLCM9070M | 9.0±0.5 | 9.5±0.5 | 7.0±0.5 | 4.8       | 5.6       | 1.5       | 1.7       | 5.5       | 1.5       | 10.5      | 5.0       |

## ■ Circuit Diagram



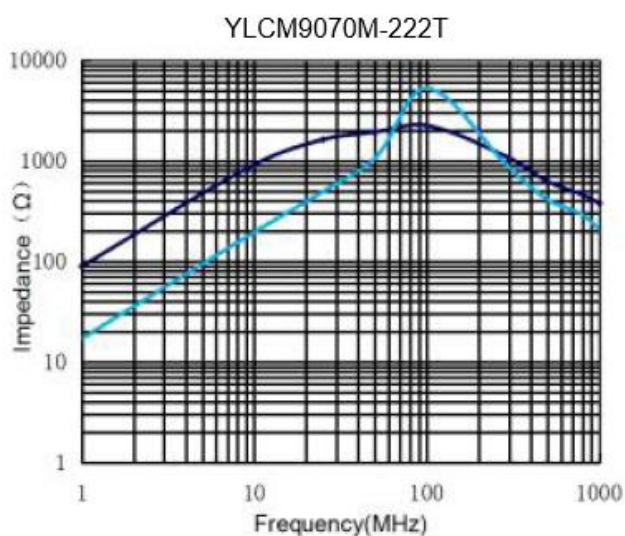
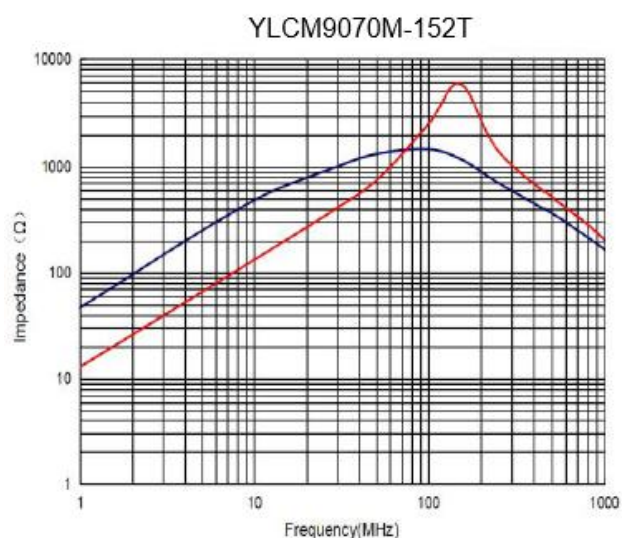
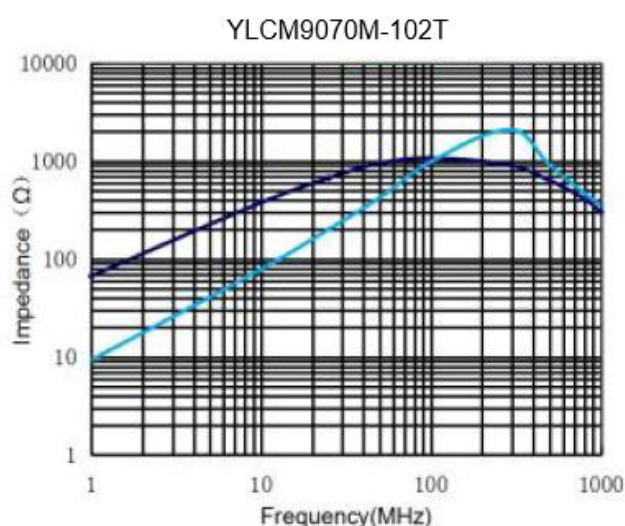
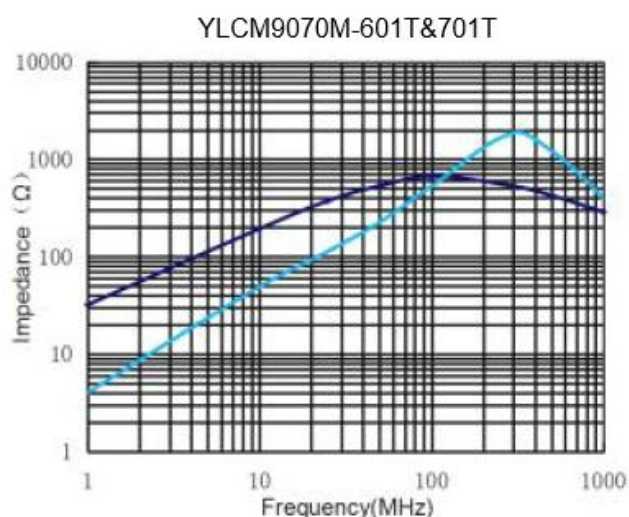
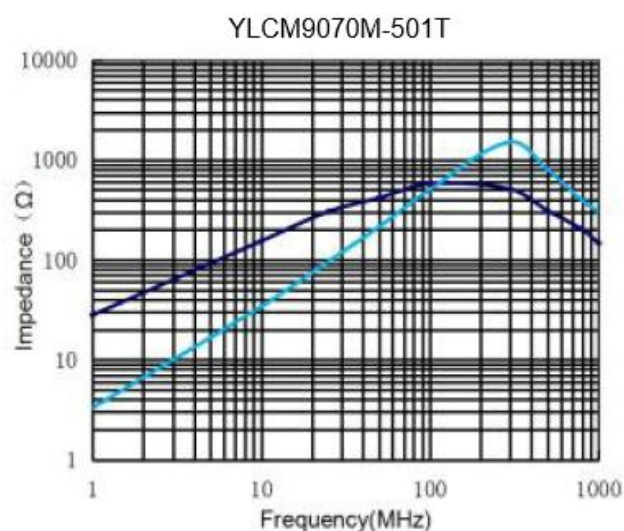
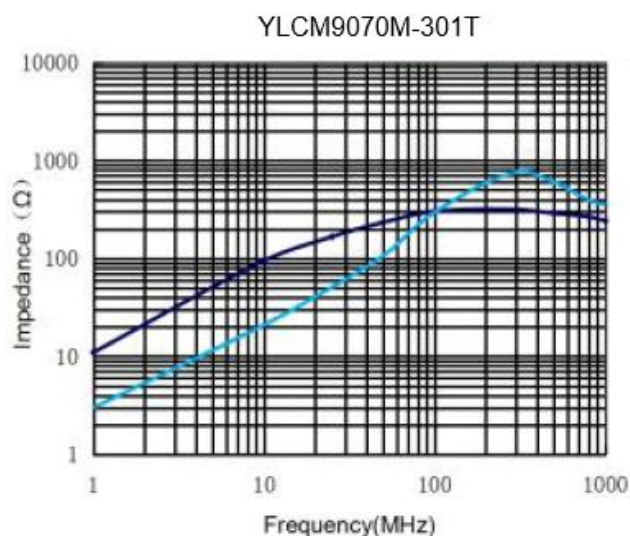
## ■ YLCM9070M Series

| Part Number    | Z (Ω) |      | Test Frequency | DCR (mΩ) Max. | Rated Current (A) max. | Rated Volt. (V)max. | IR 80V/3S (MΩ)min. |
|----------------|-------|------|----------------|---------------|------------------------|---------------------|--------------------|
|                | Min.  | Typ. |                |               |                        |                     |                    |
| YLCM9070M-301T | 225   | 300  | 100MHz         | 6             | 6.0                    | 80                  | 10                 |
| YLCM9070M-501T | 450   | 600  | 100MHz         | 8             | 5.5                    | 80                  | 10                 |
| YLCM9070M-601T | 500   | 700  | 100MHz         | 10            | 5.0                    | 80                  | 10                 |
| YLCM9070M-701T | 500   | 700  | 100MHz         | 10            | 5.0                    | 80                  | 10                 |
| YLCM9070M-102T | 750   | 1000 | 100MHz         | 13            | 4.0                    | 80                  | 10                 |
| YLCM9070M-152T | 1200  | 1500 | 100MHz         | 15            | 4.0                    | 80                  | 10                 |
| YLCM9070M-222T | 1700  | 2200 | 100MHz         | 50            | 3.0                    | 80                  | 10                 |
| YLCM9070M-272T | 2000  | 2700 | 100MHz         | 80            | 2.0                    | 80                  | 10                 |
| YLCM9070M-302T | 2500  | 3000 | 100MHz         | 85            | 1.9                    | 80                  | 10                 |
| YLCM9070M-402T | 3300  | 4000 | 20-50MHz       | 100           | 1.8                    | 80                  | 10                 |

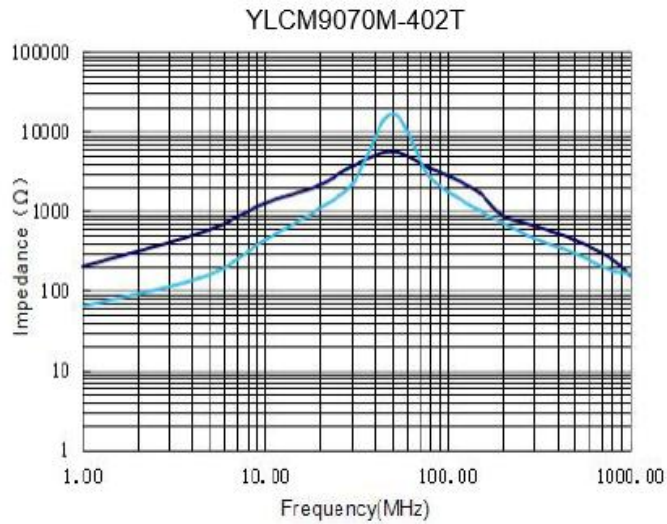
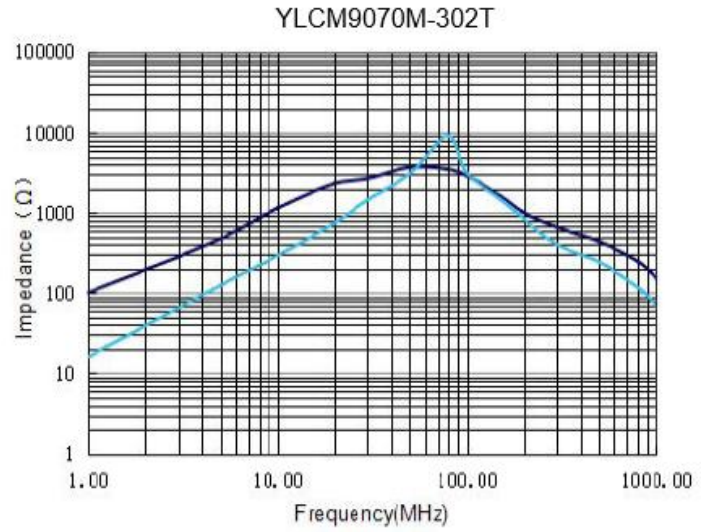
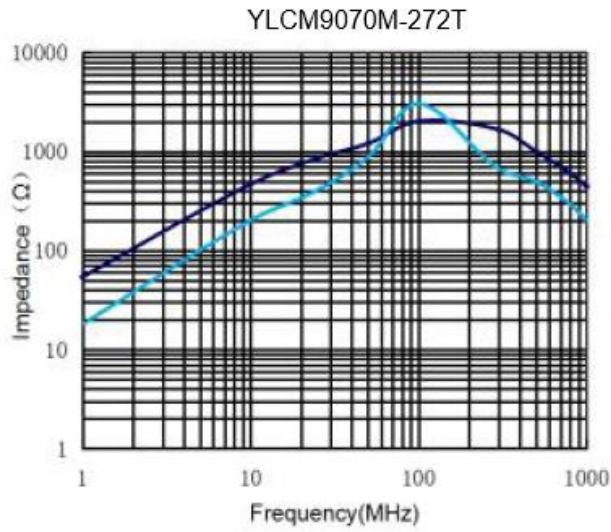
## ■ Material List

| NO. | ITEM   | DESCRIPTION |
|-----|--------|-------------|
| 1   | CORE   | FERRITE     |
| 2   | COVER  | MYLAR       |
| 3   | WIRE   | UEW-H       |
| 4   | SOLDER | LEAD-FREE   |
| 5   | INK    | BLACK       |

## ■ Characteristics(Reference)

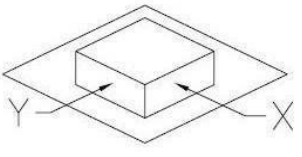


## ■ Characteristics(Reference)



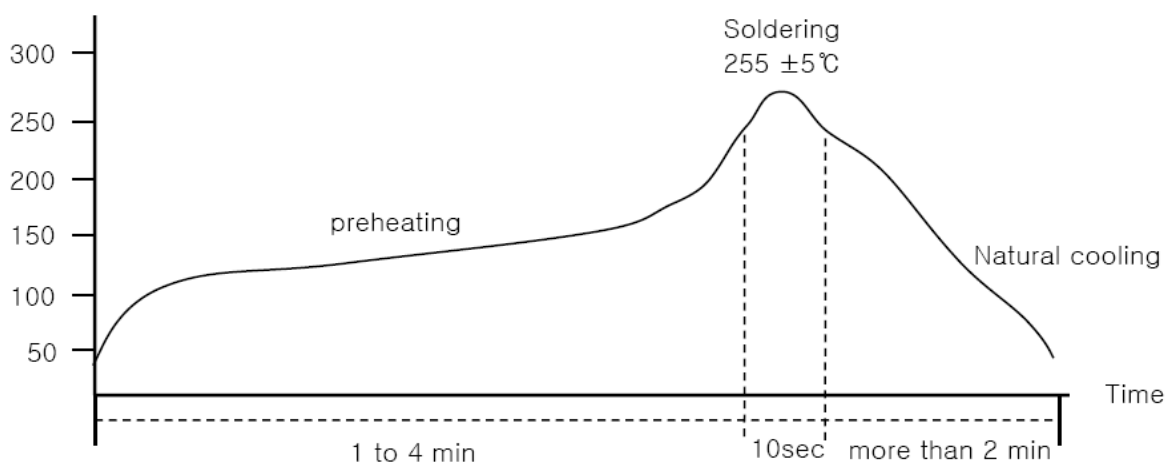


## ■ Reliability Testing

|                                                                                                        |                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Temperature                                                                                  | - 40 to + 105 °C ( Contain Heating coil )                                                                                                                                                              |
| Appearance Inspection                                                                                  | No external defects by visual inspection                                                                                                                                                               |
| Terminal Strength<br> | After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec.<br>Terminal should not peel off. ( Refer to figure at right ) |
| Heat endurance of reflow soldering                                                                     | Refer to figure                                                                                                                                                                                        |
| Insulating resistance                                                                                  | Over 10 MΩ at 80V D.C . between wire and core .                                                                                                                                                        |
| Dielectric Strength                                                                                    | Apply at 0.5KV 1mA for 3S between wire and core .                                                                                                                                                      |
| Temperature characteristics                                                                            | Inductance coefficient ( 0~2,000 ) × 10 / °C ( -40 ~ + 105 °C )                                                                                                                                        |
| Humidity characteristics                                                                               | Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition .                                                                |
| A test is made under the above mentioned condition , and it is kept for 2 hours in the normal          |                                                                                                                                                                                                        |

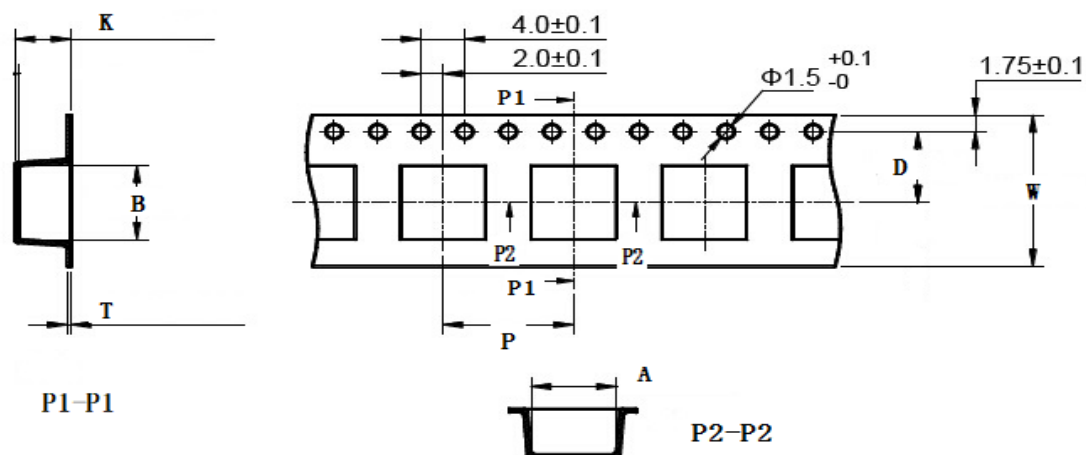
## ■ Recommended soldering temp.Graph

Temperature °C



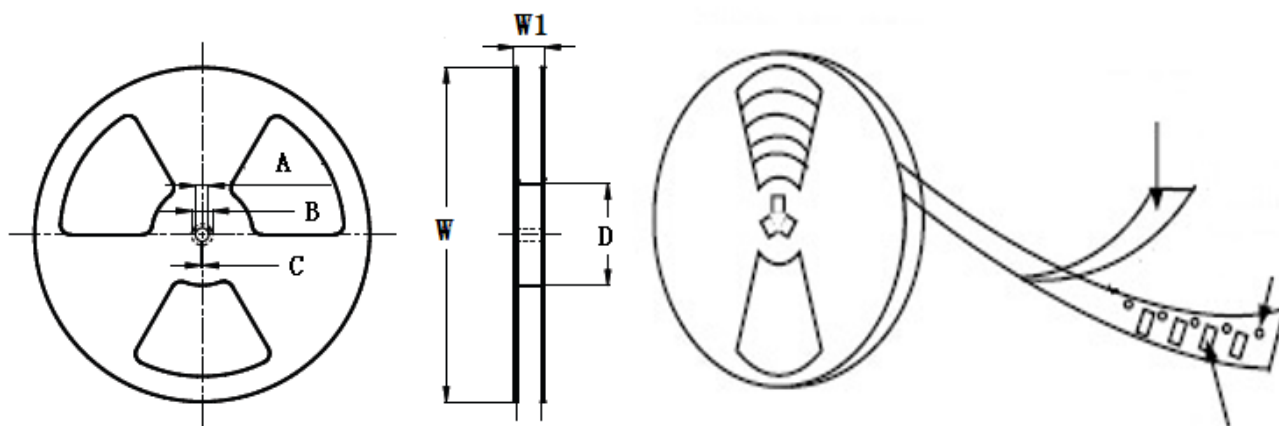
Temperature and humidity . After that , no mechanical and electrical defect should be found .

## Taping Dimensions(Unit:mm)



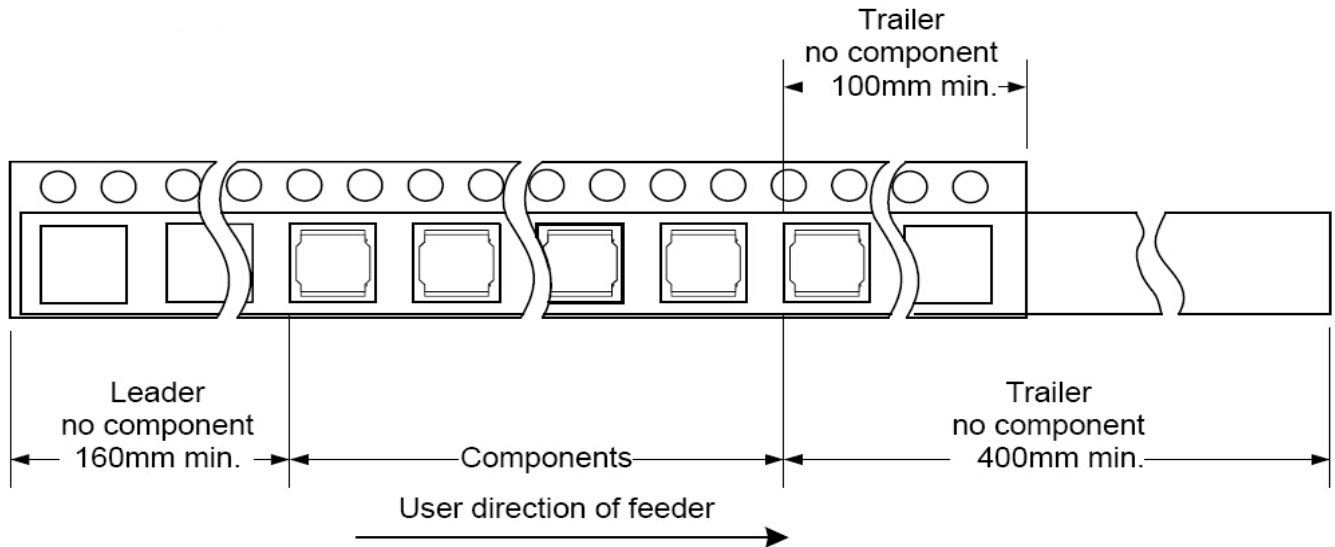
| TYPE      | W        | A       | B       | D       | P        | K       | T         | MPQ |
|-----------|----------|---------|---------|---------|----------|---------|-----------|-----|
| YLCM9070M | 24.0±0.3 | 7.6±0.1 | 9.6±0.1 | 7.5±0.1 | 16.0±0.1 | 5.1±0.1 | 0.35±0.05 | 700 |

## Reel Dimensions(Unit:mm)

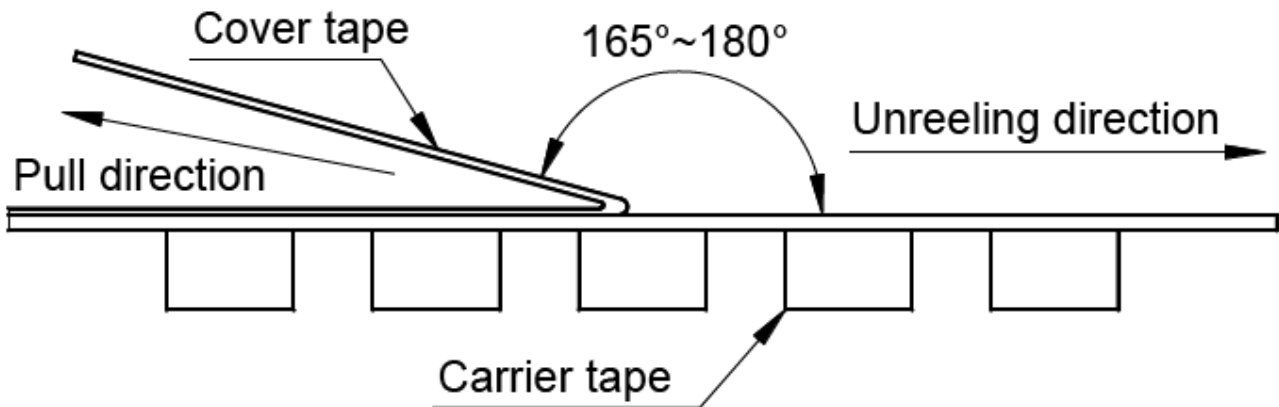


| TYPE      | W       | W1       | A         | B         | C        | D      |
|-----------|---------|----------|-----------|-----------|----------|--------|
| YLCM9070M | 330±2.0 | 16.4±2.0 | 13.0±0.50 | 21.0±0.80 | 2.0±0.50 | 100Min |

## ■ Direction of rolling



## ■ Cover tape peel off condition



Cover tape peel force shall be 0.1N to 1.3N.

Reference peel speed 300±10mm/min.