

**■ Features**

- SMD construction, and low profile.
- High Impedance and Excellent Frequency Characteristic.
- Self Electromagnetic Shielding.
- Low Magnetic Flux Leakage.

**■ Applications**

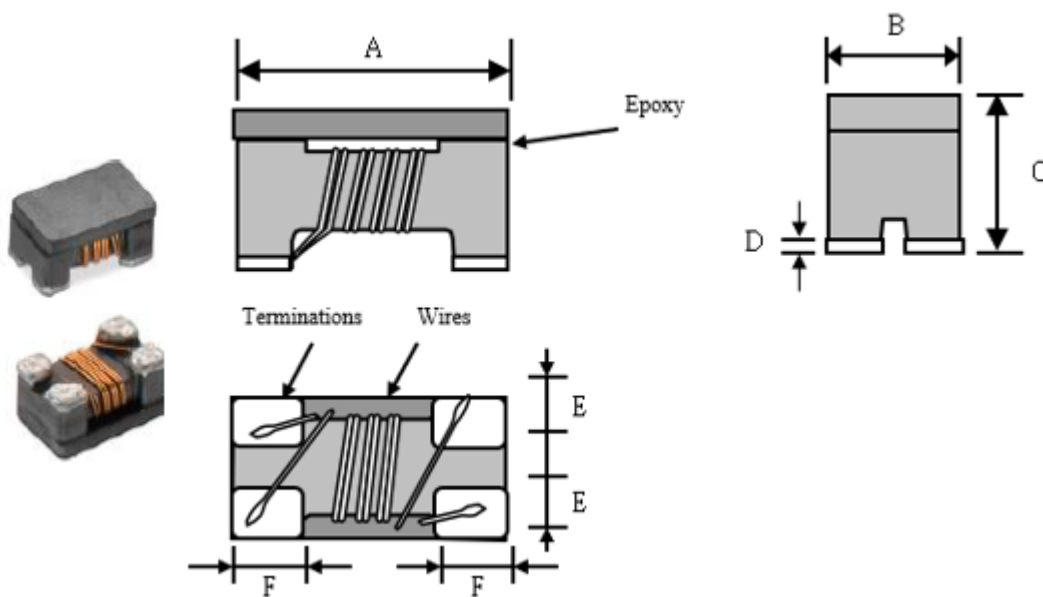
- LED Light, TV game, Monitor, etc.
- EMI common-mode noise.

**■ Product Identification**

$\frac{\text{YPCM}}{(1)}$      $\frac{\square\square\square\square}{(2)}$      $\frac{-\square\square\square}{(3)}$      $\frac{T}{(4)}$

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

**■ Shapes and Dimensions (Unit: mm)**



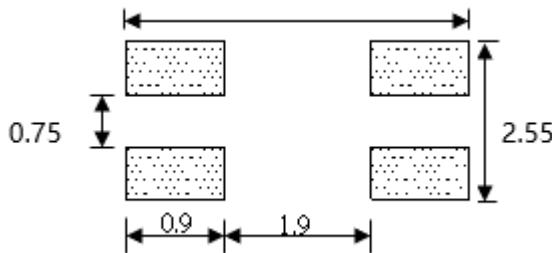
| TYPE      | A       | B       | C       | D       | E Typ. | F Typ. |
|-----------|---------|---------|---------|---------|--------|--------|
| YPCM3225A | 3.2±0.2 | 2.5±0.2 | 2.2±0.2 | 0.2±0.1 | 0.80   | 0.65   |

## Electrical Characteristics

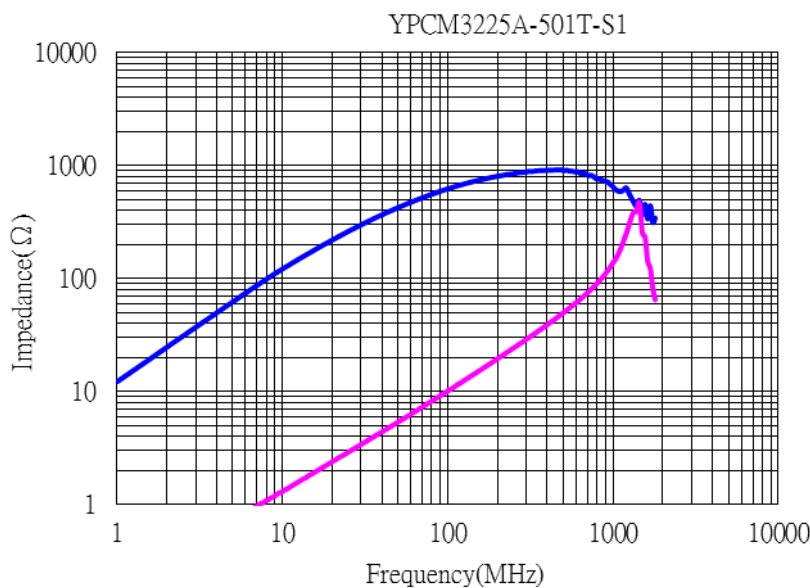
| Part Number       | Z(Ω)<br>Common mode<br>Impedance<br>@100MHz | DCR (Ω)<br>Max. | Rated current<br>Idc(A)<br>Max. | Rated Voltage<br>Vdc<br>(V)Typical | Insulation<br>Resistance<br>IR<br>(MΩ)Min. |
|-------------------|---------------------------------------------|-----------------|---------------------------------|------------------------------------|--------------------------------------------|
| YPCM3225A-501T-S1 | 500±25%                                     | 0.040           | 2.0                             | 50                                 | 10                                         |

- ※ Operating Temperature: -40°C to +85°C
- ※ Storage Temperature and humidity: -20°C up to +40°C, 75% RH max.
- ※ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ※ If Use Wave soldering is there will be some risk. Re-flow soldering temperatures below 240 degrees, there will be unwitting risk.

## Recommended Footprint(mm)



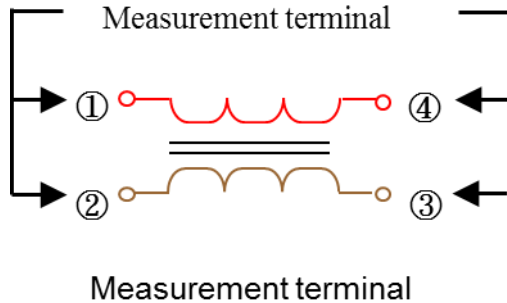
## Performance Curves



**■ Test Equipment**

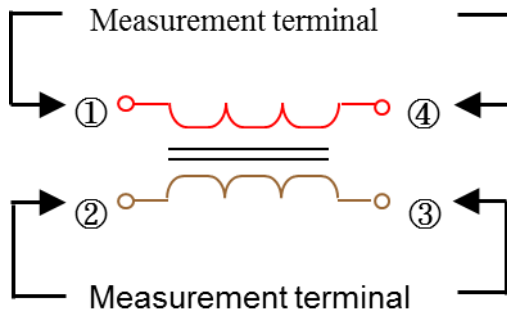
Impedance

Measured by using Agilent 4291A RF Impedance Analyzer.



DC Resistance

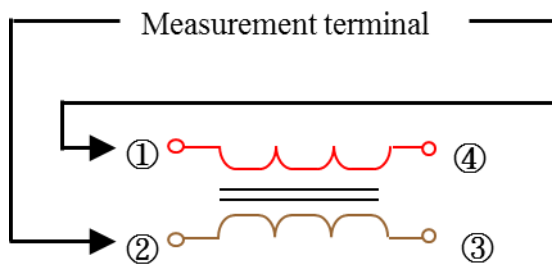
Measured by using Chroma 16502 mill ohm meter.



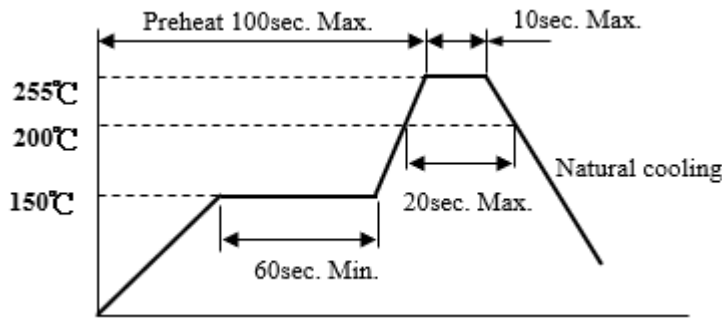
Insulation Resistance

Measured by using Chroma 19073

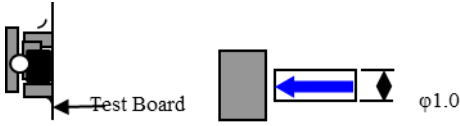
Measurement voltage : 50v , Measurement time : 60 sec.



**Recommended Soldering temp.graph**



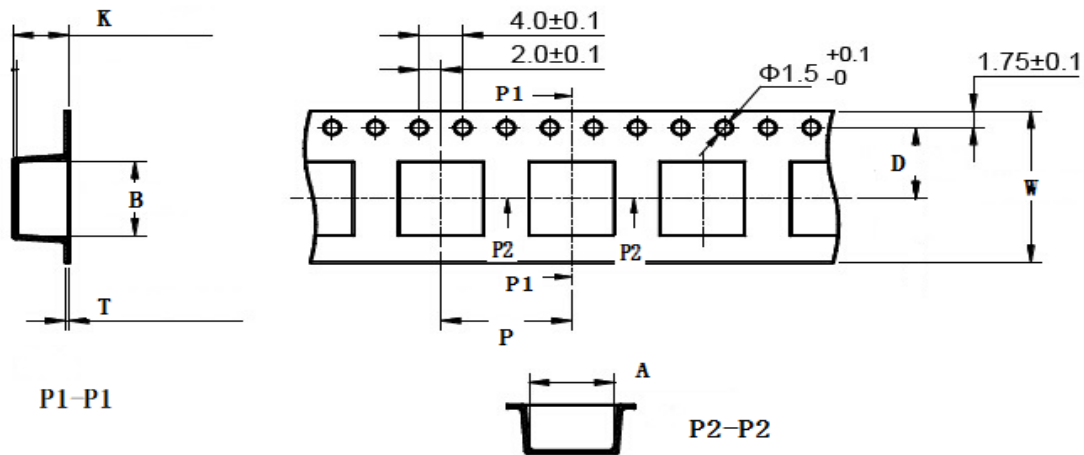
**Mechanical Reliability**

| Test                   | Method Used                                                                                                                                                                    | Specification & Requirement                                                                                                                                                                                                                                          |            |        |      |     |      |     |      |     |      |     |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|------|-----|------|-----|------|-----|------|-----|
| Solderability          | Solder heat proof:<br>Preheating: 150 ±10°C 60 seconds<br>Soldering: 245 ±5°C for 4 ±1 sec                                                                                     | The surface of terminal/pin tested shall be covered with new solder by 90%                                                                                                                                                                                           |            |        |      |     |      |     |      |     |      |     |
| Solder Heat Resistance | Preheating:150°C 60secs<br>Solder temperature: 260±5°C<br>Flux:rosin<br>Dip time:10±0.5 secs                                                                                   | Components should have not evidence of electrical and mechanical damage<br>Impedance:within ±15% of initial value                                                                                                                                                    |            |        |      |     |      |     |      |     |      |     |
| Terminal strength      | Solder a chip to test substrate and then laterally apply a force in the arrow direction<br> | <table border="1"> <thead> <tr> <th>Series No.</th> <th>F (Kg)</th> </tr> </thead> <tbody> <tr> <td>1608</td> <td>0.5</td> </tr> <tr> <td>2012</td> <td>0.5</td> </tr> <tr> <td>3216</td> <td>1.0</td> </tr> <tr> <td>3225</td> <td>1.0</td> </tr> </tbody> </table> | Series No. | F (Kg) | 1608 | 0.5 | 2012 | 0.5 | 3216 | 1.0 | 3225 | 1.0 |
| Series No.             | F (Kg)                                                                                                                                                                         |                                                                                                                                                                                                                                                                      |            |        |      |     |      |     |      |     |      |     |
| 1608                   | 0.5                                                                                                                                                                            |                                                                                                                                                                                                                                                                      |            |        |      |     |      |     |      |     |      |     |
| 2012                   | 0.5                                                                                                                                                                            |                                                                                                                                                                                                                                                                      |            |        |      |     |      |     |      |     |      |     |
| 3216                   | 1.0                                                                                                                                                                            |                                                                                                                                                                                                                                                                      |            |        |      |     |      |     |      |     |      |     |
| 3225                   | 1.0                                                                                                                                                                            |                                                                                                                                                                                                                                                                      |            |        |      |     |      |     |      |     |      |     |

**Endurance Reliability**

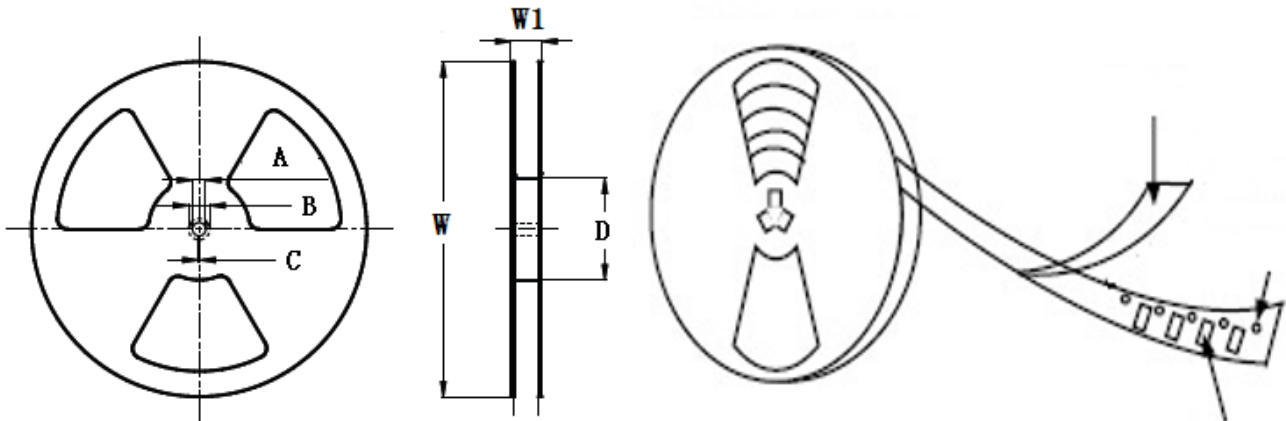
| Test                      | Method Used                                                                                     | Specification & Requirement                             |
|---------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Thermal Shock Test        | -65°C, (30 mins) -> room temp. (2 mins) -> 125°C, (30 mins) -> room temp. (2 mins)<br>50 cycles | Impedance change within ± 15% Without mechanical damage |
| High Temperature Exposure | Apply IDC current @ 60°C ambient<br>Humidity: 90%<br>Duration: 168 hrs                          | Impedance change within ± 15% Without mechanical damage |
| Low Temp. Storing         | Storing Temp.<br>-40 ±2 °C for total 168 +5/-0 hours                                            | Impedance change within ± 15% Without mechanical damage |
| High Temp. Storing        | Storing Temp.<br>125 ±2 °C for total 168 +5/-0 hours                                            | Impedance change within ± 15% Without mechanical damage |

**Taping Dimensions(Unit:mm)**



| TYPE      | W    | A    | B    | D    | P    | K Max | T Max | MPQ  |
|-----------|------|------|------|------|------|-------|-------|------|
| YPCM3225A | 8.00 | 2.80 | 3.60 | 3.50 | 4.00 | 2.30  | 0.25  | 1000 |

**Reel Dimensions(Unit:mm)**

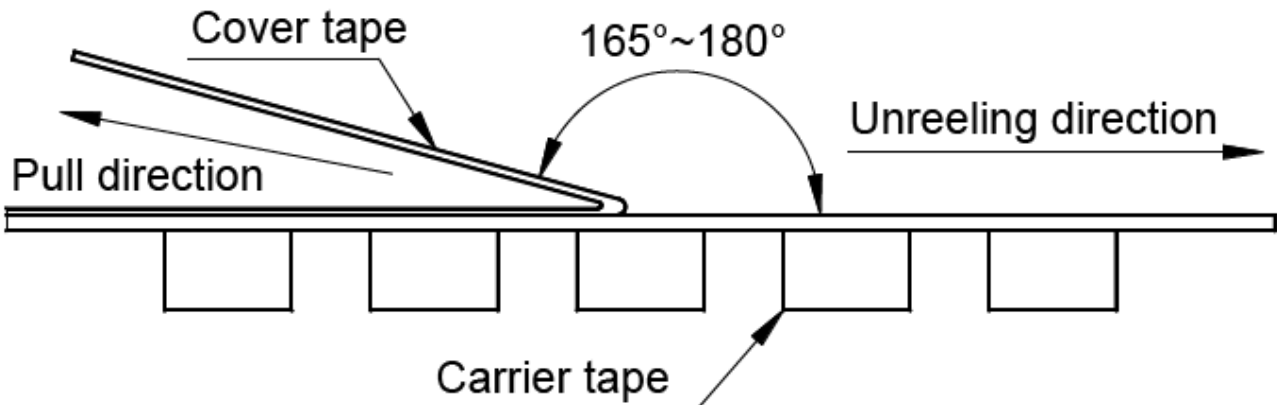


| TYPE      | W       | W1        | A        | B        | C        | D      |
|-----------|---------|-----------|----------|----------|----------|--------|
| YPCM3225A | 178±2.0 | 8.40±1.50 | 4.3±0.20 | 5.0±0.10 | 3.0±0.10 | 58±2.0 |

**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.