



# 承认书

## Approval Sheet

客户名称:

Customer

/

产品名称:

线绕电源共模滤波器

Part Name

Wire Wound Power Common Mode Filter

产品规格:

Specification

JWCM 4520~1513 Series

版本号:

Version No.

A/0

日期:

Date

2020-7-3

| 制造Manufacturer |            |            | 客户Customer |            |             |
|----------------|------------|------------|------------|------------|-------------|
| 拟制             | 审核         | 确认         | 检验         | 审核         | 批准          |
| Draft by       | Checked by | Approve by | Check by   | Checked by | Approval by |
| 周昶             | 杨岚         | 唐涛         |            |            |             |

[illegible]



| 序号No | 目 录 TABLE OF CONTENTS               |
|------|-------------------------------------|
| 1    | 产品指南Products Guide                  |
| 2    | 特征Characteristics                   |
| 3    | 应用Application                       |
| 4    | 形状和尺寸Shape And Dimensions           |
| 5    | 规格Specifications                    |
| 6    | 可靠性测试Reliability and Test Condition |
| 7    | 焊接条件Soldering Conditions            |
| 8    | 产品包装 Packaging                      |

## Products Guide产品指南

| Description                                         | Model                                                                             | P/N  | Package Size | Z ( $\Omega$ ) | Idc Max(A) | Rdc ( $\Omega$ )Max |
|-----------------------------------------------------|-----------------------------------------------------------------------------------|------|--------------|----------------|------------|---------------------|
| Wire Wound Power<br>Common Mode Filter<br>线绕电源共模滤波器 |  | JWCM | 4520         | 90-1400        | 1.9-3.2    | 35-81               |
|                                                     |                                                                                   |      | 7060         | 70-3000        | 0.9-15     | 5-75                |
|                                                     |                                                                                   |      | 9070         | 300-2700       | 2-6        | 6-86                |
|                                                     |                                                                                   |      | 1211         | 230-2700       | 1.5-10     | 2-50                |
|                                                     |                                                                                   |      | 1513         | 300-1500       | 5-13       | 5-23                |

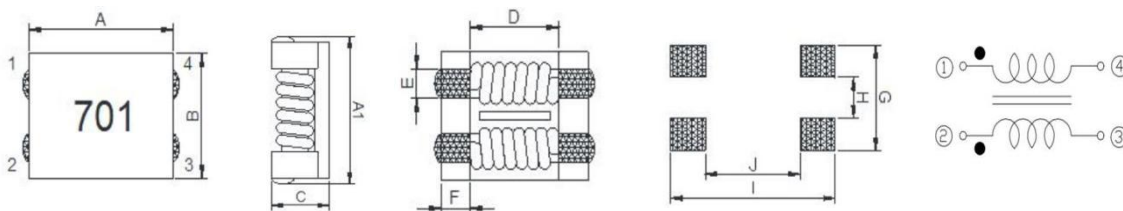
## Characteristics特征

- Common Mode Filter for high Current Capacity;
- Fit for power line & signal line circuit;
- To help you go pass the CE/FCC standard;
- Lower cost.

## Application应用

- Mobile Device;
- Handheld Device;
- LowProfile Device, LCD。

## Shape And Dimensions形状和尺寸 (Unit: mm)



| Size<br>型号 | A<br>( $\pm 0.5$ ) | A1<br>( $\pm 0.5$ ) | B<br>( $\pm 0.5$ ) | C<br>(max.) | D<br>(ref.) | E<br>(ref.) | F<br>(ref.) | G<br>(ref.) | H<br>(ref.) | I<br>(ref.) | J<br>(ref.) |
|------------|--------------------|---------------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 4520       | 4.7                | 5                   | 4.5                | 2           | 2.7         | 0.8         | 1           | 3           | 1           | 6           | 2           |
| 7060       | 7                  | 7.5                 | 6                  | 3.8         | 3.5         | 1.5         | 1.7         | 5           | 1.5         | 8           | 3           |
| 9070       | 9                  | 9.5                 | 7                  | 4.8         | 5.6         | 1.5         | 1.7         | 5.5         | 1.5         | 10.5        | 5           |
| 1211       | 12                 | 12.5                | 10.8               | 6.4         | 7           | 2.7         | 2.5         | 8.5         | 2           | 12.5        | 6.5         |
| 1513       | 15                 | 15.6                | 13                 | 6.6         | 9.4         | 2.6         | 2.5         | 9.5         | 3.3         | 16          | 8.8         |

## Product Spec. Model产品品名构成

JWCM      7060      -      900      T      L  
(1)      (2)      (3)      (4)      (5)

(1)Product symbol系列代号

(2)Dimensions 规格尺寸

(3)Impedance阻抗: 900=90Ω、102=1000Ω、272=2700Ω

(4)Tolerance公差: T=typical, S=high current

(5)Type类别: L= landscape

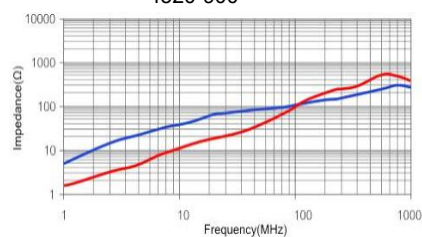
## Specifications规格

### JWCM4520 Series

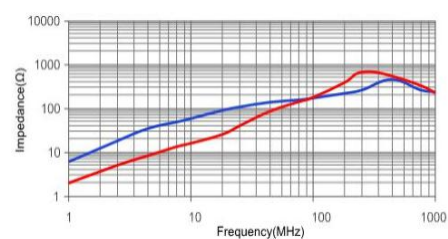
| Part NO.       | Z <br>PIN 1-4 & 2-3<br>(Ω) @100MHz |      | Rated<br>Voltage<br>(V) max. | Insulation<br>Resistance<br>(MΩ) min. | DCR<br>PIN 1-4 & 2-3<br>(mΩ) max. | IDC<br>(A) max. |
|----------------|------------------------------------|------|------------------------------|---------------------------------------|-----------------------------------|-----------------|
|                | min.                               | typ. |                              |                                       |                                   |                 |
| JWCM4520-900TL | 60                                 | 90   | 50                           | 10.0                                  | 35.0                              | 3.2             |
| JWCM4520-151TL | 90                                 | 150  | 50                           | 10.0                                  | 40.0                              | 3.1             |
| JWCM4520-231TL | 180                                | 230  | 50                           | 10.0                                  | 45.0                              | 3.0             |
| JWCM4520-301TL | 200                                | 300  | 50                           | 10.0                                  | 45.0                              | 3.0             |
| JWCM4520-401TL | 300                                | 420  | 50                           | 10.0                                  | 50.0                              | 2.5             |
| JWCM4520-701TL | 500                                | 700  | 50                           | 10.0                                  | 59.0                              | 2.2             |
| JWCM4520-901TL | 650                                | 900  | 50                           | 10.0                                  | 68.0                              | 2.1             |
| JWCM4520-102TL | 800                                | 1000 | 50                           | 10.0                                  | 68.0                              | 2.1             |
| JWCM4520-122TL | 1000                               | 1200 | 50                           | 10.0                                  | 74.0                              | 2.0             |
| JWCM4520-142TL | 1200                               | 1400 | 50                           | 10.0                                  | 81.0                              | 1.9             |

IDC: The actual value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ )

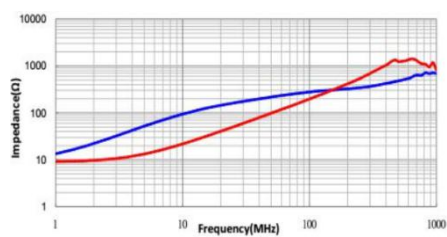
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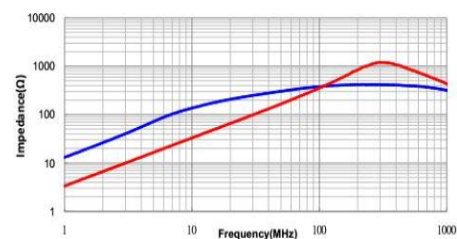
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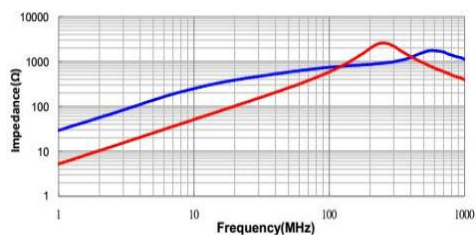
4520-231&301



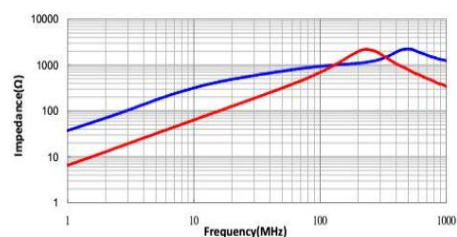
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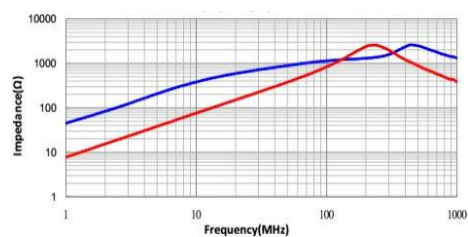
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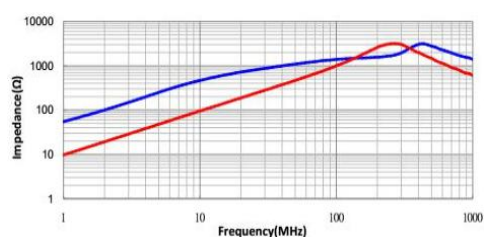
4520-901&102



4520-122



4520-142

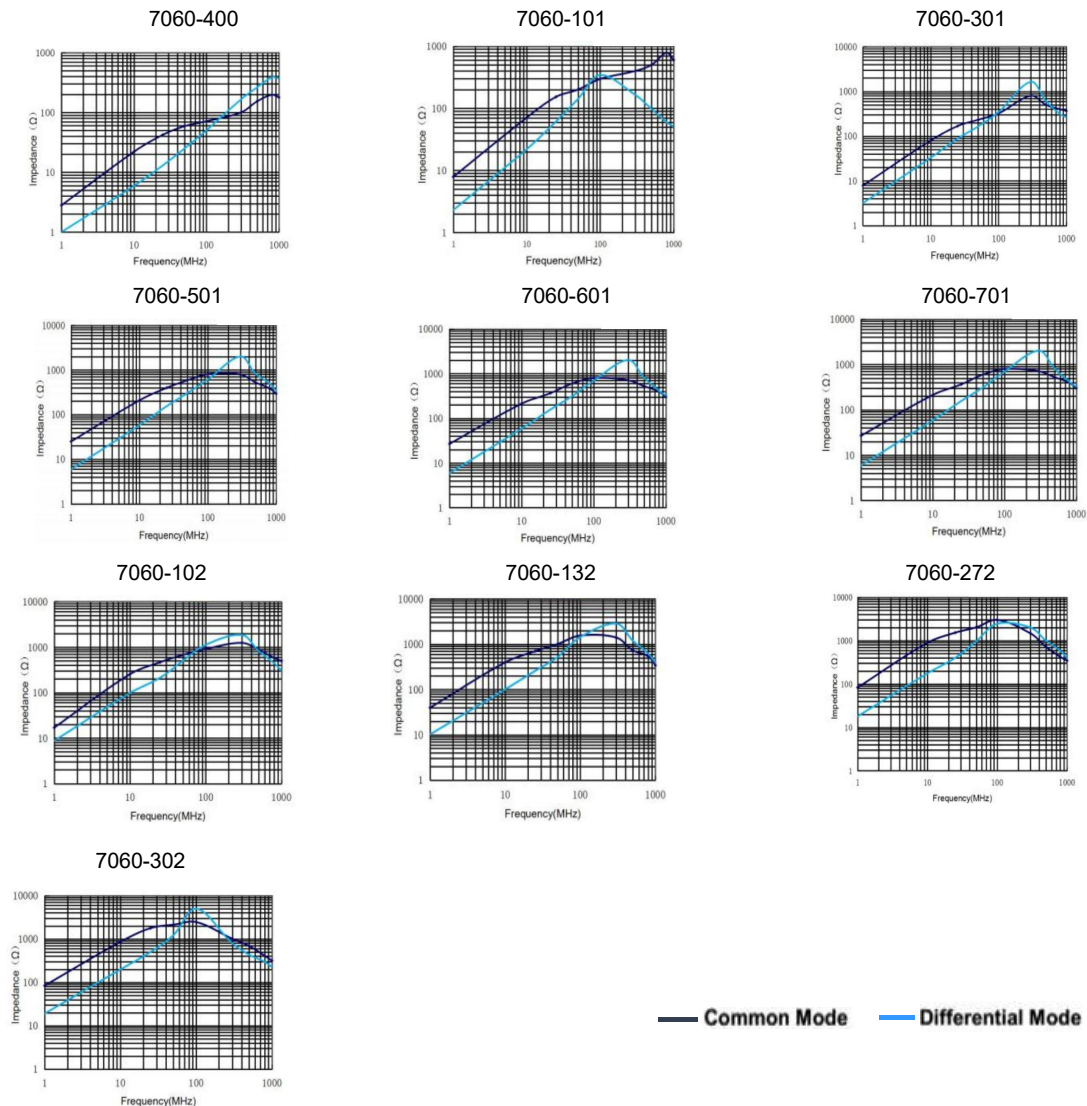


— Common Mode — Differential Mode

### JWCM7060 Series

| Part NO.       | Z <br>PIN 1-4 & 2-3<br>(Ω) @100MHz |      | Rated<br>Voltage<br>(V) max. | Insulation<br>Resistance<br>(MΩ) min. | DCR<br>PIN 1-4 & 2-3<br>(mΩ) max. | IDC<br>(A) max. |
|----------------|------------------------------------|------|------------------------------|---------------------------------------|-----------------------------------|-----------------|
|                | min.                               | typ. |                              |                                       |                                   |                 |
| JWCM7060-400TL | 40                                 | 70   | 80                           | 10.0                                  | 5.0                               | 15.0            |
| JWCM7060-101TL | 100                                | 140  | 80                           | 10.0                                  | 10.0                              | 9.0             |
| JWCM7060-301TL | 225                                | 300  | 80                           | 10.0                                  | 10.0                              | 5.0             |
| JWCM7060-501TL | 275                                | 500  | 80                           | 10.0                                  | 10.0                              | 5.0             |
| JWCM7060-601TL | 500                                | 700  | 80                           | 10.0                                  | 15.0                              | 4.0             |
| JWCM7060-701TL | 500                                | 700  | 80                           | 10.0                                  | 15.0                              | 4.0             |
| JWCM7060-102TL | 800                                | 1020 | 80                           | 10.0                                  | 17.0                              | 3.0             |
| JWCM7060-132TL | 910                                | 1300 | 80                           | 10.0                                  | 21.0                              | 2.5             |
| JWCM7060-272TL | 2000                               | 2700 | 80                           | 10.0                                  | 63.0                              | 1.0             |
| JWCM7060-302TL | 2500                               | 3000 | 80                           | 10.0                                  | 75.0                              | 0.9             |

IDC: The actual value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ )

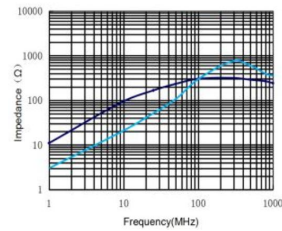


## JWCM9070 Series

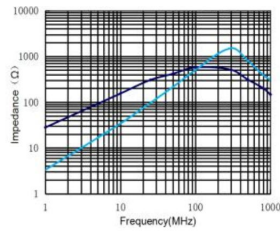
| Part NO.       | Z <br>PIN 1-4 & 2-3<br>(Ω) @100MHz |      | Rated<br>Voltage<br>(V) max. | Insulation<br>Resistance<br>(MΩ) min. | DCR<br>PIN 1-4 & 2-3<br>(mΩ) max. | IDC<br>(A) max. |
|----------------|------------------------------------|------|------------------------------|---------------------------------------|-----------------------------------|-----------------|
|                | min.                               | typ. |                              |                                       |                                   |                 |
| JWCM9070-301TL | 225                                | 300  | 80                           | 10.0                                  | 6.0                               | 6.0             |
| JWCM9070-501TL | 450                                | 500  | 80                           | 10.0                                  | 8.0                               | 5.5             |
| JWCM9070-701TL | 500                                | 700  | 80                           | 10.0                                  | 10.0                              | 5.0             |
| JWCM9070-102TL | 750                                | 1000 | 80                           | 10.0                                  | 13.0                              | 4.0             |
| JWCM9070-222TL | 1700                               | 2200 | 80                           | 10.0                                  | 50.0                              | 3.0             |
| JWCM9070-272TL | 2000                               | 2700 | 80                           | 10.0                                  | 86.0                              | 2.0             |

IDC: The actual value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ )

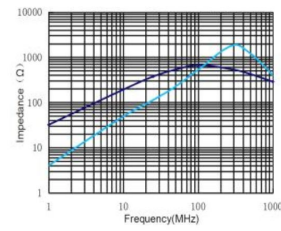
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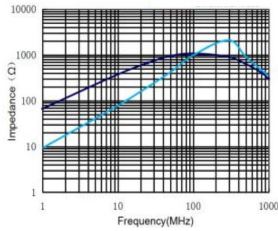
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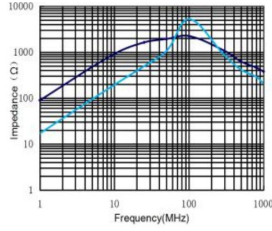
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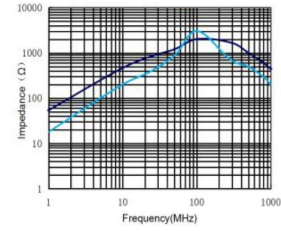
9070-102



9070-222



9070-701



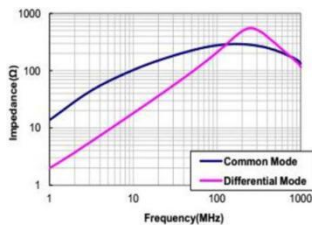
— Common Mode — Differential Mode

## JWCM1211 Series

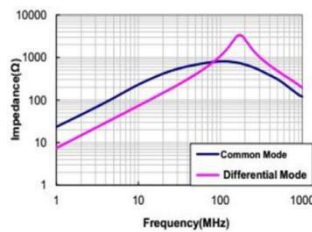
| Part NO.       | Z <br>PIN 1-4 & 2-3<br>(Ω) @100MHz |      | Rated<br>Voltage<br>(V) max. | Insulation<br>Resistance<br>(MΩ) min. | DCR<br>PIN 1-4 & 2-3<br>(mΩ) max. | IDC<br>(A) max. |
|----------------|------------------------------------|------|------------------------------|---------------------------------------|-----------------------------------|-----------------|
|                | min.                               | typ. |                              |                                       |                                   |                 |
| JWCM1211-800TL | 80                                 | 230  | 125                          | 10.0                                  | 2.0                               | 10.0            |
| JWCM1211-701TL | 500                                | 700  | 125                          | 10.0                                  | 6.0                               | 8.0             |
| JWCM1211-801TL | 600                                | 800  | 125                          | 10.0                                  | 8.0                               | 8.0             |
| JWCM1211-102TL | 750                                | 1000 | 125                          | 10.0                                  | 14.0                              | 6.0             |
| JWCM1211-222TL | 2200                               | 2500 | 125                          | 10.0                                  | 35.0                              | 1.8             |
| JWCM1211-272TL | 2300                               | 2700 | 125                          | 10.0                                  | 50.0                              | 1.5             |

IDC: The actual value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ )

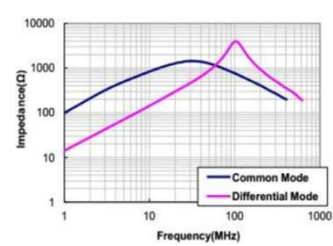
1211-800



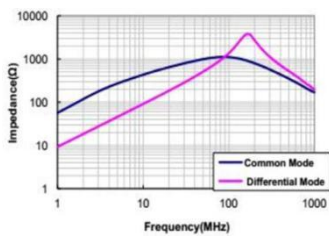
1211-701



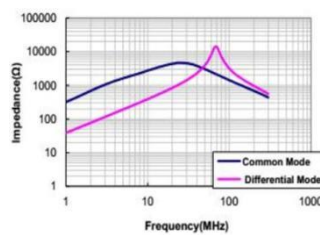
1211-801



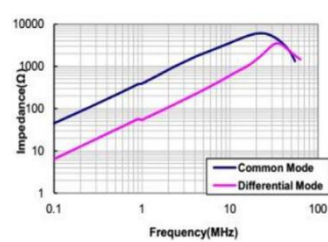
1211-102



1211-222



1211-272

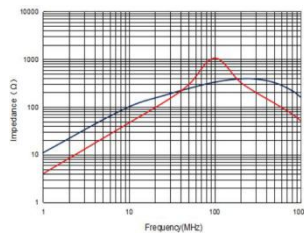


### JWCM1513 Series

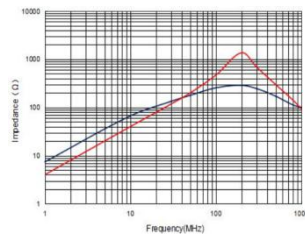
| Part NO.       | Z <br>PIN 1-4 & 2-3<br>(Ω) @100MHz |      | Rated<br>Voltage<br>(V) max. | Insulation<br>Resistance<br>(MΩ) min. | DCR<br>PIN 1-4 & 2-3<br>(mΩ) max. | IDC<br>(A) max. |
|----------------|------------------------------------|------|------------------------------|---------------------------------------|-----------------------------------|-----------------|
|                | min.                               | typ. |                              |                                       |                                   |                 |
| JWCM1513-301TL | 225                                | 300  | 80                           | 10.0                                  | 5.0                               | 13.0            |
| JWCM1513-301SL | 225                                | 300  | 80                           | 10.0                                  | 4.0                               | 15.0            |
| JWCM1513-551TL | 400                                | 550  | 80                           | 10.0                                  | 5.0                               | 10.0            |
| JWCM1513-551SL | 400                                | 550  | 80                           | 10.0                                  | 6.0                               | 12.0            |
| JWCM1513-501TL | 400                                | 500  | 80                           | 10.0                                  | 6.0                               | 10.0            |
| JWCM1513-601TL | 500                                | 600  | 80                           | 10.0                                  | 7.0                               | 10.0            |
| JWCM1513-701TL | 500                                | 700  | 80                           | 10.0                                  | 7.0                               | 10.0            |
| JWCM1513-102TL | 800                                | 1000 | 80                           | 10.0                                  | 10.0                              | 9.0             |
| JWCM1513-152TL | 1200                               | 1500 | 80                           | 10.0                                  | 23.0                              | 5.0             |

IDC: The actual value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ )

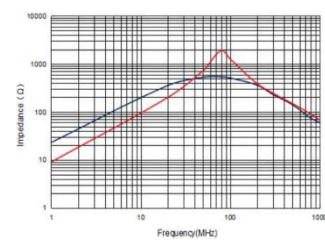
1513-301



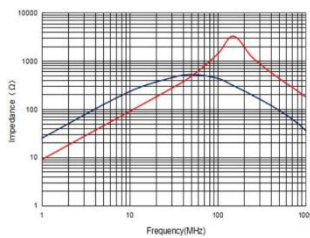
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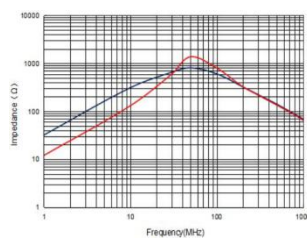
1513-501&551



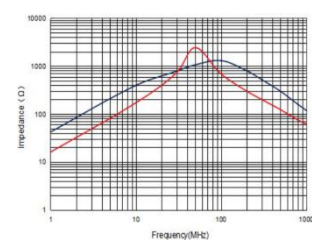
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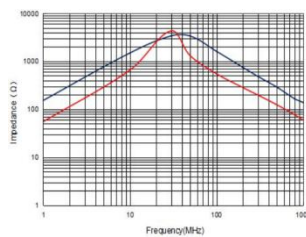
1513-601&701



1513-102



1513-152



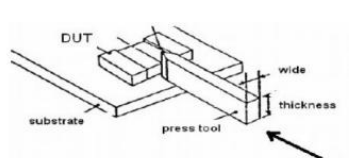
— Common Mode

— Differential Mode

## Reliability and Test Condition1可靠性测试1

| Items                              | Performance                                                                                                                                                                                                                                            | Test Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature              | -40~+125℃ (Including self - temperature rise)                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Storage temperature                | -40~+125℃ (on board)                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Electrical Performance Test</b> |                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Z(common mode)                     | Refer to standard electrical characteristics list.                                                                                                                                                                                                     | Agilent-4291A+ Agilent -16197A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| DCR                                |                                                                                                                                                                                                                                                        | Agilent-4338B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I.R.                               |                                                                                                                                                                                                                                                        | Agilent4339                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Temperature Rise Test              | Rated Current $\geq$ 1A $\Delta T$ 40℃ Max                                                                                                                                                                                                             | 1.Applied the allowed DC current.<br>2.Temperature measured by digital surface thermometer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Reliability Test</b>            |                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Life Test                          | Appearance : No damage. Inductance : within $\pm$ 10% of initial value Impedance : within $\pm$ 15% of initial value Q : Shall not exceed the specification value RDC : within $\pm$ 15% of initial value and shall not exceed the specification value | Preconditioning: Run through IR reflow for 2 times.( IPC/JEDEC J-STD-020DClassification Reflow Profiles)<br>Temperature: 125 $\pm$ 2℃ Applied current: rated current Duration: 1000 $\pm$ 12hrs<br>Measured at room temperature after placing for 24 $\pm$ 2 hrs                                                                                                                                                                                                                                                                                                                                                   |
| Load Humidity                      |                                                                                                                                                                                                                                                        | Preconditioning: Run through IR reflow for 2 times.( IPC/JEDEC J-STD-020DClassification Reflow Profiles<br>Humidity: 85 $\pm$ 2 % R.H, Temperature: 85℃ $\pm$ 2℃<br>Duration: 1000hrs Min. with 100% rated current<br>Measured at room temperature after placing for 24 $\pm$ 2 hrs                                                                                                                                                                                                                                                                                                                                |
| Moisture Resistance                |                                                                                                                                                                                                                                                        | Preconditioning: Run through IR reflow for 2 times.( IPC/JEDEC J-STD-020DClassification Reflow Profiles<br>1. Baked at50℃ for 25hrs, measured at room temperature after placing for 4 hrs.<br>2. Raise temperature to 65 $\pm$ 2℃ 90-100%RH in 2.5hrs, and keep 3 hours, cool down to 25℃ in 2.5hrs.<br>3. Raise temperature to 65 $\pm$ 2℃ 90-100%RH in 2.5hrs, and keep 3 hours, cool down to 25℃ in 2.5hrs,keep at 25℃ for 2 hrs then keep at -10℃ for 3 hrs<br>4. Keep at 25℃ 80-100%RH for 15min and vibrate at the frequency of 10 to 55 Hz to 10 Hz, measure at room temperature after placing for 1~2 hrs. |
| Thermal shock                      |                                                                                                                                                                                                                                                        | Preconditioning: Run through IR reflow for 2 times.( IPC/JEDEC J-STD-020DClassification Reflow Profiles Condition for 1 cycle<br>Step1: -40 $\pm$ 2℃ 30 $\pm$ 5min Step2: 25 $\pm$ 2℃ $\leq$ 0.5min Step3: 125 $\pm$ 2℃ 30 $\pm$ 5min<br>Number of cycles: 500<br>Measured at room temperature after placing for 24 $\pm$ 2 hrs                                                                                                                                                                                                                                                                                    |
| Vibration                          |                                                                                                                                                                                                                                                        | Oscillation Frequency: 10~2K~10Hz for 20 minutes<br>Equipment: Vibration checker Total Amplitude:1.52mm $\pm$ 10%<br>Testing Time : 12 hours(20 minutes, 12 cycles each of 3 orientations)。                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Reliability and Test Condition2可靠性测试2

| Items                        | Performance                                                                                                                       | Test Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                           |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|----------------------------------------------|-----------------------|---------------------------|-------|----------------|----|-----------|------|------|----|----|-----------|------|
| Bending                      | Appearance : No damage.<br>Impedance : within±15% of initial value<br>Inductance : within±10% of initial value                    | Shall be mounted on a FR4 substrate of the following dimensions: >=0805 inch(2012mm):40x100x1.2mm<br><0805 inch(2012mm):40x100x0.8mm<br>Bending depth: >=0805 inch(2012mm):1.2mm<br><0805 inch(2012mm):0.8mm<br>duration of 10 sec.                                                                                                                                                                                                                                                                       |                       |                           |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
| Shock                        | Q : Shall not exceed the specification value. RDC : within ±15% of initial value and shall not exceed the specification value     | <table><tr><th>Type</th><th>Peak value(g's)</th><th>ration (D) (ms)</th><th>Wave form</th><th>Velocity hange (Vi)ft/sec</th></tr><tr><td>SMD</td><td>50</td><td>11</td><td>Half-sine</td><td>11.3</td></tr><tr><td>Lead</td><td>50</td><td>11</td><td>Half-sine</td><td>11.3</td></tr></table>                                                                                                                                                                                                            | Type                  | Peak value(g's)           | ration (D) (ms)                              | Wave form             | Velocity hange (Vi)ft/sec | SMD   | 50             | 11 | Half-sine | 11.3 | Lead | 50 | 11 | Half-sine | 11.3 |
| Type                         | Peak value(g's)                                                                                                                   | ration (D) (ms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Wave form             | Velocity hange (Vi)ft/sec |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
| SMD                          | 50                                                                                                                                | 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Half-sine             | 11.3                      |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
| Lead                         | 50                                                                                                                                | 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Half-sine             | 11.3                      |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
| Solder ability               | More than 95% of the terminal electrode should be covered with solder.                                                            | Preheat: 150℃,60sec.。<br>Solder: Sn96.5% Ag3% Cu0.5% Temperature: 245±5℃。<br>Flux for lead free: Rosin. 9.5%。 Dip time: 4±1sec。<br>Depth: completely cover the termination                                                                                                                                                                                                                                                                                                                                |                       |                           |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
| Resistance to Soldering Heat | Appearance : No damage.<br>Impedance : within±15% of initial value<br>Inductance : within±10% of initial value                    | Depth: completely cover the termination<br><table><tr><th>Temperature(℃)</th><th>Time(s)</th><th>Temperature ramp/immersion and emersion rate</th><th>Number of heat cycles</th></tr><tr><td>260 ±5 (solder temp)</td><td>10 ±1</td><td>25mm/s ±6 mm/s</td><td>1</td></tr></table>                                                                                                                                                                                                                        | Temperature(℃)        | Time(s)                   | Temperature ramp/immersion and emersion rate | Number of heat cycles | 260 ±5 (solder temp)      | 10 ±1 | 25mm/s ±6 mm/s | 1  |           |      |      |    |    |           |      |
| Temperature(℃)               | Time(s)                                                                                                                           | Temperature ramp/immersion and emersion rate                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Number of heat cycles |                           |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
| 260 ±5 (solder temp)         | 10 ±1                                                                                                                             | 25mm/s ±6 mm/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                     |                           |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |
| Terminal Strength            | Q : Shall not exceed the specification value<br>RDC : within ±15% of initial value and shall not exceed the specification value e | Preconditioning: Run through IR reflow for 2 times.( IPC/JEDEC J-STD-020DClassification Reflow Profiles<br><br>With the component mounted on a PCB with the device to be tested, apply a force(>0805:1kg , <=0805:0.5kg)to the side of a device being tested. This force shall be applied for 60 +1 seconds. Also the force shall be applied gradually as not to apply a shock to the component being tested.<br><br> |                       |                           |                                              |                       |                           |       |                |    |           |      |      |    |    |           |      |

## 焊接条件Soldering Conditions

### Soldering

Mildly activated rosin fluxes are preferred. TAI-TECH terminations are suitable for all wave and re-flow soldering systems.

If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

#### Lead Free Solder re-flow:

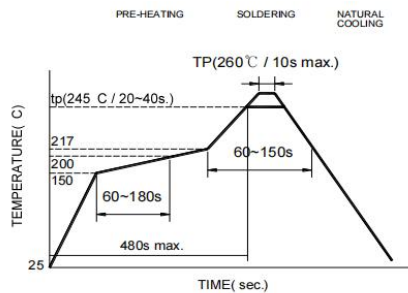
Recommended temperature profiles for re-flow soldering in Figure 1.

#### Soldering Iron(Figure 3):

Products attachment with a soldering iron is discouraged due to the inherent process control limitations. In the event that a soldering iron must be employed the following precautions are recommended.

- Preheat circuit and products to 150℃
- Never contact the ceramic with the iron tip
- Use a 20 watt soldering iron with tip diameter of 1.0mm
- 350℃ tip temperature (max)
- 1.0mm tip diameter (max)
- Limit soldering time to 4~5 sec.

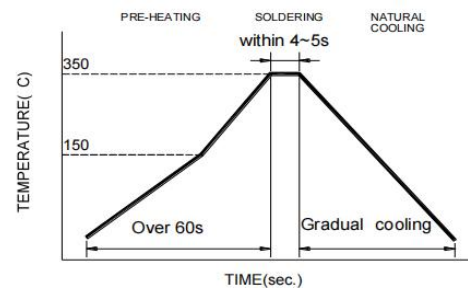
Reflow Soldering



Reflow times: 3 times max.

Fig.1

Iron Soldering

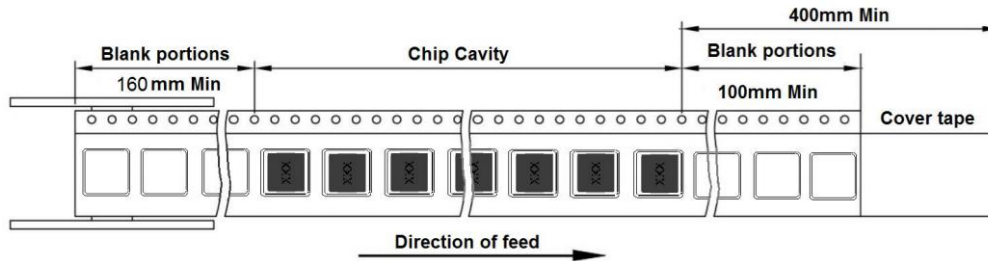


Iron Soldering times: 1 times max.

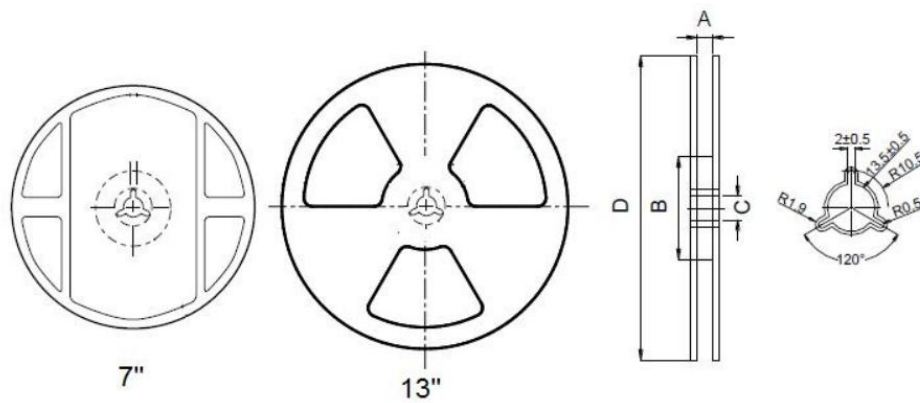
Fig.2

## Packaging产品包装 (unit: mm)

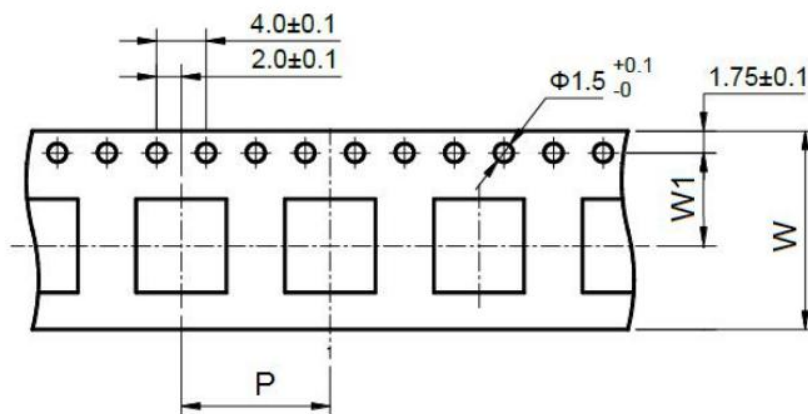
### Tape and Reel Specifications: (Dimensions are in mm)



### Reel Dimensions (mm)



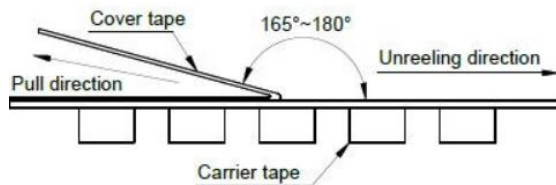
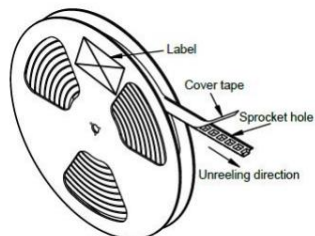
### Tape Dimension (mm)



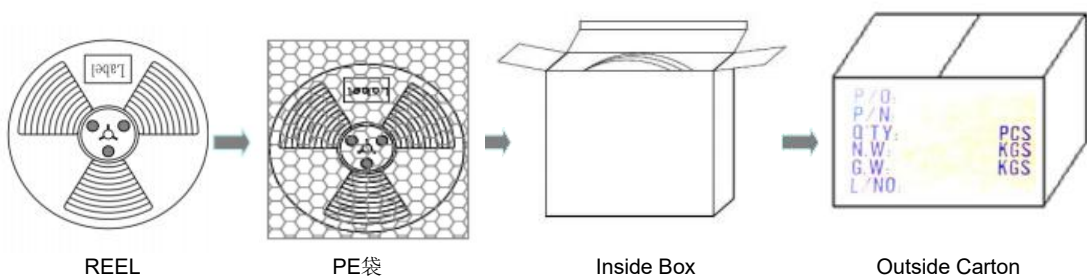
## Cover tape peel off condition

a) Cover tape peel force shall be 10 to 120g

b) Noodle strip peeling angle 165° to 180°



## Packing quantity



不足整箱用内盒或填充物装满

| Part No. | Tape Dimension |    |      | Reel Dimensions |     |    |     | REEL<br>(PCS) | Inside<br>Box(PCS) | Outside<br>Carton(PCS) |
|----------|----------------|----|------|-----------------|-----|----|-----|---------------|--------------------|------------------------|
|          | W              | P  | W1   | A               | B   | C  | D   |               |                    |                        |
| JWCM4520 | 12             | 8  | 5.5  | 12.4            | 60  | 13 | 180 | 1000          | 4000               | 40,000                 |
| JWCM7060 | 16             | 12 | 7.5  | 16.4            | 60  | 13 | 330 | 1500          | 4500               | 22,500                 |
| JWCM9070 | 24             | 16 | 11.5 | 24.4            | 60  | 13 | 330 | 700           | 1400               | 7000                   |
| JWCM1008 | 24             | 16 | 11.5 | 24.4            | 60  | 13 | 330 | 500           | 1000               | 5000                   |
| JWCM1211 | 24             | 16 | 11.5 | 24.4            | 60  | 13 | 330 | 500           | 1000               | 5000                   |
| JWCM1513 | 24             | 20 | 11.5 | 24.5            | 100 | 13 | 330 | 350           | 700                | 2100                   |