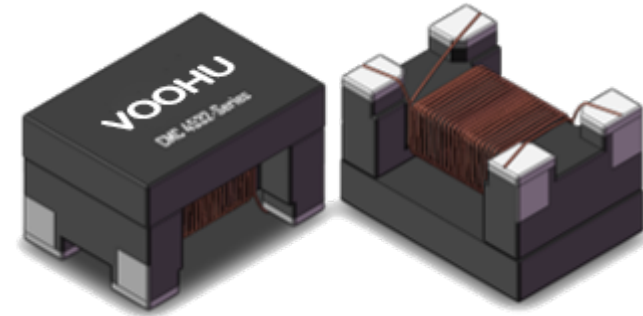


## 1 Features And Benefits

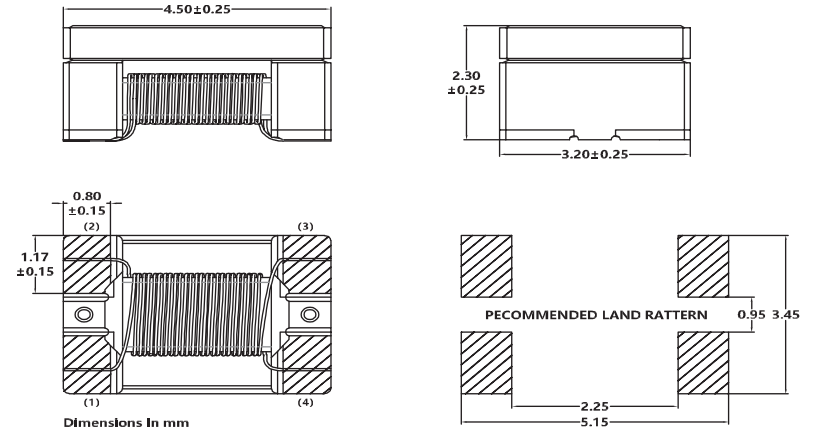
- Suppression of common mode noise without attenuating the signal
- Supports CAN-FD, CAN-Bus, A2B and other IVN high speed differential signal lines (LVDS) for Automotive and Industrial use including PLC data lines
- Passes IEC6228-3 CLASS 3 performance and CiA 110
- High Common Mode Impedance at 10MHz
- Meets AEC-Q200 Requirement
- R&D and Factory IATF-16949 Certified
- Operating temperature -55℃ to +150℃
- Rated Voltage 80v Max



## 2 Electrical Specifications @ 25℃

| Part Number      | Common Mode Impedance (10MHZ) |      | Inductance (uH)<br>+50/-30% | RDC (Ω)Max | Leakage Inductance (nH) typ | Isolation Resistance (MΩ) Min | Rated Current (mA) Max | Rated Voltage (V) Max |
|------------------|-------------------------------|------|-----------------------------|------------|-----------------------------|-------------------------------|------------------------|-----------------------|
|                  | ΩMin                          | Ωtyp |                             |            |                             |                               |                        |                       |
| WHAC-4532A-110U0 | 300                           | 600  | 11                          | 1.2        | 50                          | 10                            | 250                    | 50                    |
| WHAC-4532A-220U0 | 500                           | 1200 | 22                          | 1.4        | 80                          | 10                            | 200                    | 50                    |
| WHAC-4532A-510U0 | 1000                          | 2800 | 51                          | 1.8        | 150                         | 10                            | 200                    | 50                    |
| WHAC-4532A-101U0 | 2000                          | 5800 | 100                         | 2.5        | 200                         | 10                            | 150                    | 50                    |

## 3 Dimensions (mm)& recommend layout



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TITLE:  
Common Mode Choke

SIZE  
A4

UNITS  
MM[INCH]

GENERAL TOLERANCES  
UNLESS SPECIFIED

APPROVED BY:  
Geoffrey.Song

PART NO.:  
WHAC-4532A-U0 Series

SACLE  
1:1

REV  
A0

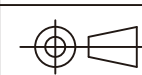
$x \pm 0.35$   
 $.x \pm 0.30$   
 $.xx \pm 0.25$   
 $.xxx \pm 0.10$

$x^\circ \pm 3.0^\circ$   
 $.x^\circ \pm 2.0^\circ$   
 $.xx^\circ \pm 1.5^\circ$   
 $.xxx^\circ \pm 1.0^\circ$

CHECKED BY:  
Elvis.Song

REMARK:

SHEET  
1/5

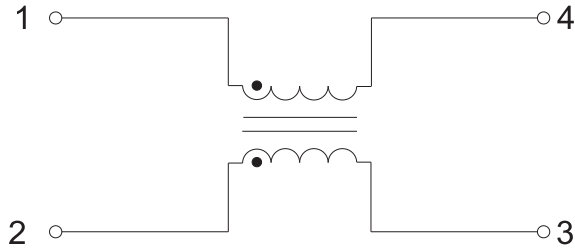


DESIGND BY:  
Sunny.Xu

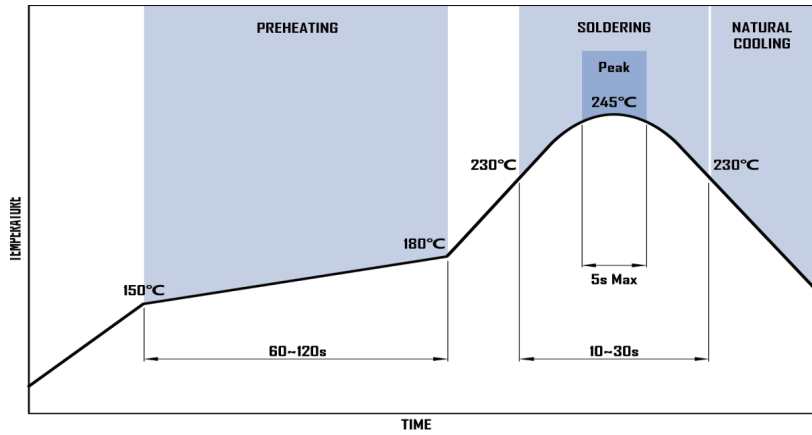
TEL: +86 400 1048 018

WEB: [WWW.WOHU-TEK.COM](http://WWW.WOHU-TEK.COM)

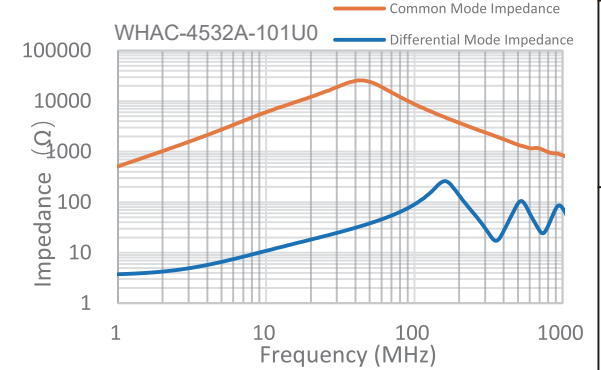
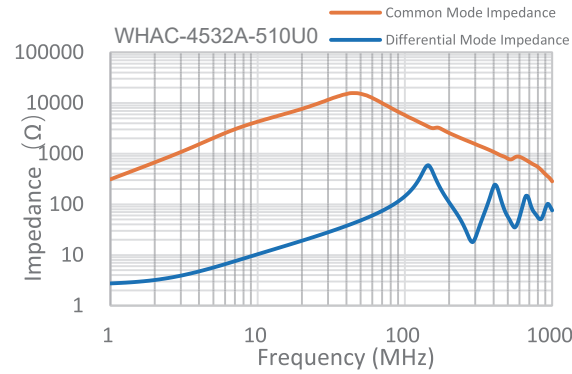
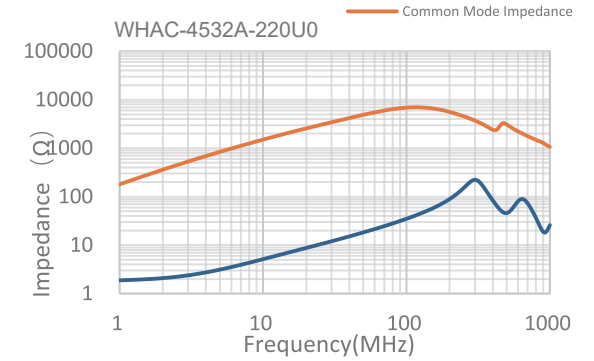
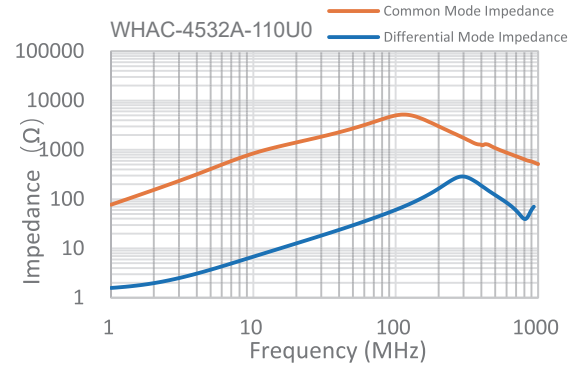
#### 4 Schematics



#### 6 Recommended Reflow Profile



#### 5 Impedance VS. Frequency



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TITLE:  
Common Mode Choke

PART NO.:  
WHAC-4532A-U0 Series

REMARK:

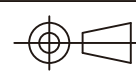
SIZE  
A4

SACLE  
1:1

SHEET  
2/5

UNITS  
MM[INCH]

REV  
A0



GENERAL TOLERANCES  
UNLESS SPECIFIED

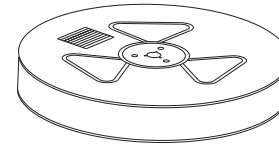
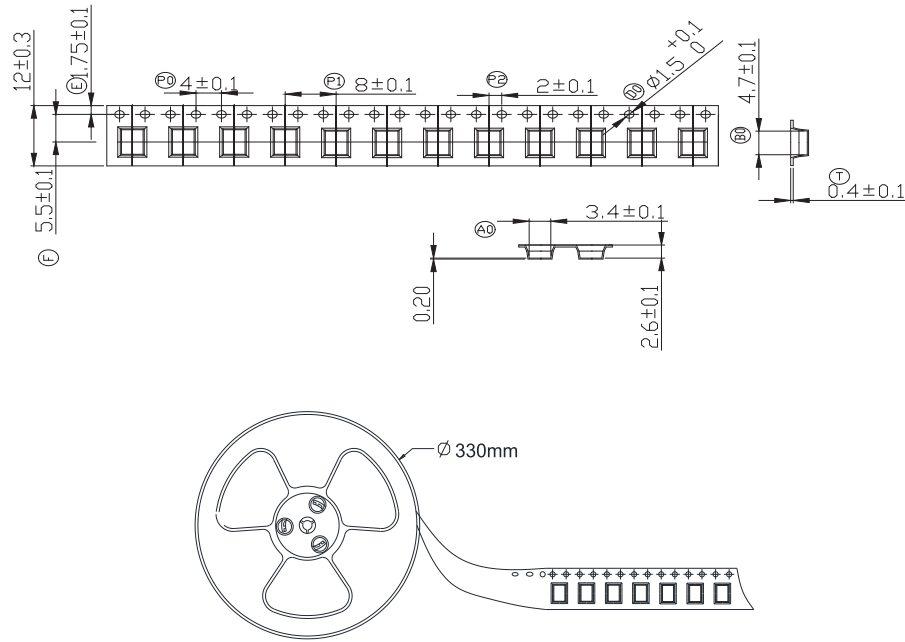
|                 |                            |
|-----------------|----------------------------|
| $x \pm 0.35$    | $x^\circ \pm 3.0^\circ$    |
| $.x \pm 0.30$   | $.x^\circ \pm 2.0^\circ$   |
| $.xx \pm 0.25$  | $.xx^\circ \pm 1.5^\circ$  |
| $.xxx \pm 0.10$ | $.xxx^\circ \pm 1.0^\circ$ |

APPROVED BY:  
Geoffrey.Song

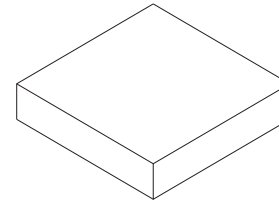
CHECKED BY:  
Elvis.Song

DESIGND BY:  
Sunny.Xu

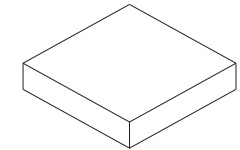
## 7 Packaging specification



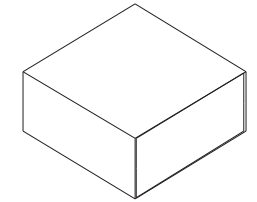
Four Reel



Five Inner Carton



Inner Carton



Export Carton

Package Quantity:  
 One Reel=2000 Pcs  
 One Inner Carton=2000\*4=8000 Pcs  
 One Export Carton=8000\*5=40000 Pcs

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TITLE:  
Common Mode Choke

PART NO.:  
WHAC-4532A-U0 Series

REMARK:

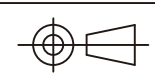
SIZE  
A4

SACLE  
1:1

SHEET  
3/5

UNITS  
MM[INCH]

REV  
A0



GENERAL TOLERANCES  
UNLESS SPECIFIED

|                 |                            |
|-----------------|----------------------------|
| $x \pm 0.35$    | $x^\circ \pm 3.0^\circ$    |
| $.x \pm 0.30$   | $.x^\circ \pm 2.0^\circ$   |
| $.xx \pm 0.25$  | $.xx^\circ \pm 1.5^\circ$  |
| $.xxx \pm 0.10$ | $.xxx^\circ \pm 1.0^\circ$ |

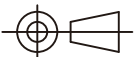
APPROVED BY:  
Geoffrey.Song

CHECKED BY:  
Elvis.Song

DESIGND BY:  
Sunny.Xu

TEL: +86 400 1048 018

WEB: [WWW.WOHU-TEK.COM](http://WWW.WOHU-TEK.COM)

|                                                                        |                    |   |                                   |   |              |                                                                                       |                                        |            |                               |  |
|------------------------------------------------------------------------|--------------------|---|-----------------------------------|---|--------------|---------------------------------------------------------------------------------------|----------------------------------------|------------|-------------------------------|--|
|                                                                        | 1                  | 2 | 3                                 | 4 | 5            | 6                                                                                     | 7                                      | 8          |                               |  |
| H                                                                      | 8 Reliability test |   |                                   |   |              |                                                                                       |                                        |            | H                             |  |
| G                                                                      |                    |   |                                   |   |              |                                                                                       |                                        |            | G                             |  |
| F                                                                      |                    |   |                                   |   |              |                                                                                       |                                        |            | F                             |  |
| E                                                                      |                    |   |                                   |   |              |                                                                                       |                                        |            | E                             |  |
| D                                                                      |                    |   |                                   |   |              |                                                                                       |                                        |            | D                             |  |
| C                                                                      |                    |   |                                   |   |              |                                                                                       |                                        |            | C                             |  |
| B                                                                      |                    |   |                                   |   |              |                                                                                       |                                        |            | B                             |  |
| A                                                                      |                    |   |                                   |   |              |                                                                                       |                                        |            | A                             |  |
| <div>VOOHU 苏州沃虎电子科技有限公司<br/>Su Zhou Voohu Electronic Tech.Co.Ltd</div> |                    |   | TITLE:<br>Common Mode Choke       |   | SIZE<br>A4   | UNITS<br>MM[INCH]                                                                     | GENERAL TOLERANCES<br>UNLESS SPECIFIED |            | APPROVED BY:<br>Geoffrey.Song |  |
|                                                                        |                    |   | PART NO.:<br>WHAC-4532A-U0 Series |   | SACLE<br>1:1 | REV<br>A0                                                                             | x±0.35                                 | x°±3.0°    | CHECKED BY:<br>Elvis.Song     |  |
| TEL: +86 400 1048 018                                                  |                    |   | REMARK:                           |   | SHEET<br>4/5 |  | .xx±0.25                               | .xx°±1.5°  | DESIGND BY:<br>Sunny.Xu       |  |
| WEB: WWW.WOHU-TEK.COM                                                  |                    |   |                                   |   |              |                                                                                       | .xxx±0.10                              | .xxx°±1.0° |                               |  |



REMINDERS

The best assembly quality guarantee period of product: 12 months (From shipment date)  
Storage condition : seal in packaging, (temperature: 5 to 40°C)humidity: 10 to 75% RH or less).

If taking out for use, the remaining products should be sealed in plastic gs and preserved in accordancesserved with the above conditions, to avoid oxidation of electrodes and affect soldering status.

Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).

Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.

Always handle products with care to avoid damage.

Do not touch electrodes with bare hands directly, as oil secrettions may inhibit soldering  
Always ensure optimum conditions for soldering.

Soldering corrections after mounting should be within the range of the conditions determined in the specifications.If overheated, a short circuit, performance deterioraticon, or lifespan shortening may occur

Use a wrist band to discharge static electricity in your body through the grounding wire.

Do not expose the products to magnets or magnetic fields.

Do not use for a purpose outside of the contents regulated inthe delivery specifications.

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Su Zhou Voohu Electronic Tech.Co.Ltd

TITLE:  
Common Mode Choke

PART NO.:  
WHAC-4532A-U0 Series

REMARK:

SIZE  
A4

SACLE  
1:1

SHEET  
5/5

UNITS  
MM[INCH]

REV  
A0



GENERAL TOLERANCES  
UNLESS SPECIFIED

|         |          |
|---------|----------|
| x±0.35  | x°±3.0°  |
| .x±0.30 | .x°±2.0° |

|           |            |
|-----------|------------|
| .xx±0.25  | .xx°±1.5°  |
| .xxx±0.10 | .xxx°±1.0° |

APPROVED BY:  
Geoffrey.Song

CHECKED BY:  
Elvis.Song

DESIGND BY:  
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