



# 零件承认书

SPECIFICATION FOR APPROVAL

客户名称: 0001

规格描述: ZYNR4018磁胶电感规格书

日 期: 2023/10/10

增益签核:

| 制订 | 审核 | 核准 |
|----|----|----|
| 夏琳 | 陈雨 | 李万 |

客户签核:

| 工程 | 审核 | 核准 |
|----|----|----|
|    |    |    |



东莞市增益实业有限公司

地址: 东莞市塘厦镇林村塘厦大道北552号

电话: 0769-87321000

传真: 0769-87891229

物料类型:

磁胶电感

日 期:

2023/10/10

版 本:

A



#### ◆特征:

- 磁性胶水涂敷结构极大减少了蜂鸣声
- 大电流低直流阻抗
- 直接在磁芯上金属化电极,抗跌落冲击强  
经久耐用
- 闭合磁路结构设计,漏磁少,抗 EMI 能力强
- 省空间,更省电
- 符合 RoHS,无卤和 REACH

#### ◆用途:

- 广泛应用于 LED 背光板、平板电视、  
蓝光 DVD 机顶盒、笔记本电脑、台式电脑、  
服务器、显卡、便携式游戏机、个人导航系统、  
多媒体、汽车产品 、通信设备、直流转换.

#### ◆环境:

- 工作温度:  $-40^{\circ}\text{C}$  至  $+125^{\circ}\text{C}$   
(包括线圈自身温升)

#### ◆试验设备:

- 电感值:HP4284A, HP4285A 或同等仪器
- 电流:HP4284+42841A
- 直流电阻: Chroma 16502 或同等仪器

#### ◆产品型号:

#### Features:

- Magnetic-resin shielded construction reduces buzz  
Noise to ultra-low levels
- Large Current and Low DCR
- Metallization on Ferrite Core results in excellent shock  
Resistance and damage-free durability
- Closed magnetic circuit design reduces leakage  
Flux and Electro Magnetic Interference (EMI)
- Takes up less PCB real estate and save more power  
Small parasitic capacitance
- RoHS, Halogen Free and REACH Compliance

#### Applications:

- LED backlight、Flat-screen TVs, blue-ray disc  
Set top box、Notebooks, desktop computers, servers,  
Graphic cards、Portable gaming devices, personal  
Navigation systems, personal multimedia devices,  
Automotive systemsTelecomm base station 、DC-DC  
Converter

#### Environmental Data:

- Operating Temperature:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$   
(Including coils self-temperature rise)

#### Test Equipment:

- L:HP4284A or HP4285A LCR meter or equivalent
- Isat & Irms: HP4284+42841A
- DCR:Chroma 16502 or equivalent

#### Product Identification:

ZYNR

①

8040

②

---

100

M

①

| 类型 Type |                                                                                                                                  |
|---------|----------------------------------------------------------------------------------------------------------------------------------|
| ZYNR    | 闭磁路贴片磁胶电感<br>Shielded SMT<br>Power Inductors  |

②

| 外形尺寸(L×W×H) (mm)<br>External Dimensions (L×W×H)<br>(mm) |             |
|---------------------------------------------------------|-------------|
| 8040                                                    | 8.0×8.0×4.2 |

Inductance

10 uH

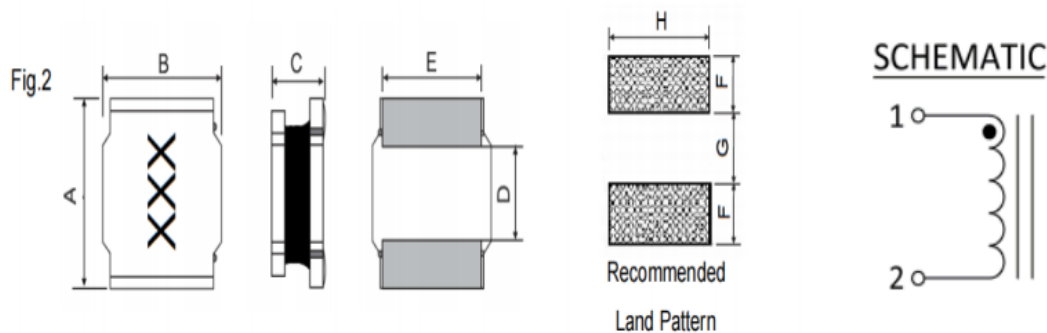
公差 Inductance Tolerance

K:  $\pm 10\%$ ,

M:  $\pm 20\%$ , N:  $\pm 30\%$

◆外观尺寸:

Shape and Dimensions(dimensions are in mm):



| Part No  | ITEM  |         |         |         |         |         |         |         |         |
|----------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
|          | Shap  | A       | B       | C       | D       | E       | F       | G       | H       |
| ZYNR4018 | Fig.2 | 4.0±0.3 | 4.0±0.3 | 1.8 Max | 2.1±0.2 | 3.3±0.2 | 1.1 Typ | 1.9 Typ | 3.7 Typ |



# ZYNR4018 Series

| Part Number   | Inductance<br>(uH) @100KHz | DC Resistance (Ω) |       | 额定电流<br>Current (A) | 饱和电流<br>Current (A) |
|---------------|----------------------------|-------------------|-------|---------------------|---------------------|
|               |                            | Typ.              | Max.  |                     |                     |
| ZYNR4018-R22□ | 0.22                       | 0.010             | 0.013 | 5.50                | 6.30                |
| ZYNR4018-R47□ | 0.47                       | 0.014             | 0.018 | 4.00                | 4.30                |
| ZYNR4018-R68□ | 0.68                       | 0.020             | 0.026 | 3.30                | 4.90                |
| ZYNR4018-1R0□ | 1.00                       | 0.025             | 0.033 | 2.00                | 4.80                |
| ZYNR4018-1R2□ | 1.20                       | 0.025             | 0.033 | 2.00                | 3.40                |
| ZYNR4018-1R5□ | 1.50                       | 0.030             | 0.039 | 1.80                | 3.35                |
| ZYNR4018-1R8□ | 1.80                       | 0.034             | 0.044 | 2.00                | 3.00                |
| ZYNR4018-2R2□ | 2.20                       | 0.045             | 0.059 | 1.65                | 2.70                |
| ZYNR4018-3R3□ | 3.30                       | 0.070             | 0.091 | 1.23                | 2.45                |
| ZYNR4018-3R6□ | 3.60                       | 0.090             | 0.117 | 1.20                | 2.50                |
| ZYNR4018-4R7□ | 4.70                       | 0.090             | 0.117 | 1.20                | 1.70                |
| ZYNR4018-5R6□ | 5.60                       | 0.107             | 0.139 | 1.50                | 1.60                |
| ZYNR4018-6R8□ | 6.80                       | 0.110             | 0.143 | 1.06                | 1.45                |
| ZYNR4018-8R2□ | 8.20                       | 0.170             | 0.221 | 1.40                | 1.40                |
| ZYNR4018-100□ | 10.0                       | 0.180             | 0.234 | 0.84                | 1.30                |
| ZYNR4018-150□ | 15.0                       | 0.250             | 0.325 | 0.65                | 0.94                |
| ZYNR4018-220□ | 22.0                       | 0.360             | 0.468 | 0.59                | 0.80                |
| ZYNR4018-270□ | 27.0                       | 0.470             | 0.611 | 0.47                | 0.52                |
| ZYNR4018-330□ | 33.0                       | 0.530             | 0.689 | 0.49                | 0.56                |
| ZYNR4018-470□ | 47.0                       | 0.650             | 0.845 | 0.42                | 0.57                |
| ZYNR4018-560□ | 56.0                       | 1.000             | 1.300 | 0.32                | 0.61                |
| ZYNR4018-680□ | 68.0                       | 1.000             | 1.300 | 0.32                | 0.47                |
| ZYNR4018-101□ | 100                        | 1.750             | 2.275 | 0.25                | 0.40                |
| ZYNR4018-151□ | 150                        | 2.500             | 3.250 | 0.22                | 0.31                |
| ZYNR4018-221□ | 220                        | 4.000             | 5.200 | 0.17                | 0.27                |

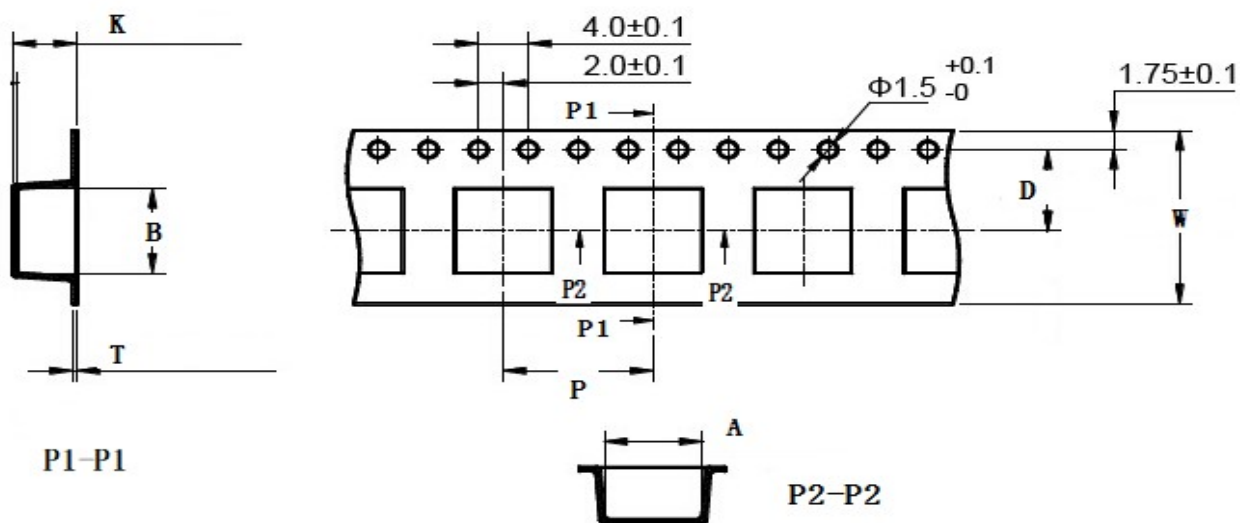
※ The saturation current value is the DC current value having inductance decrease down to 30%.(at 20℃)

※ The temperature rise current value is the DC current value having temperature increase up to 40℃. (at 20℃)

※ The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

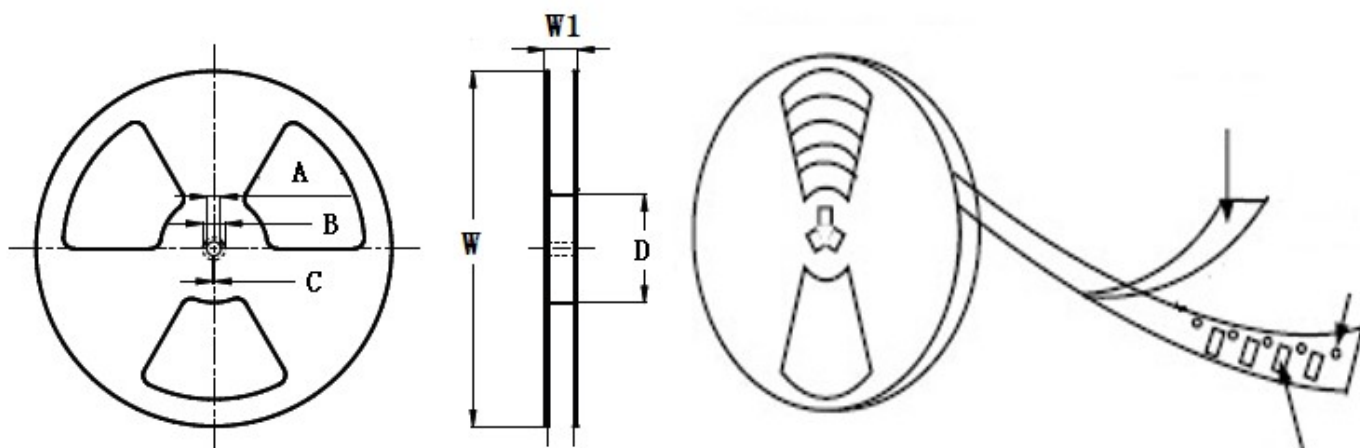


## ■ Taping Dimensions(Unit:mm)



| TYPE     | Chip Thickness | W    | A    | B    | D    | P    | K Max | T Max | MPQ  |
|----------|----------------|------|------|------|------|------|-------|-------|------|
| ZYNR4018 | 1.80           | 12.0 | 4.30 | 4.30 | 5.50 | 8.00 | 2.10  | 0.35  | 3000 |

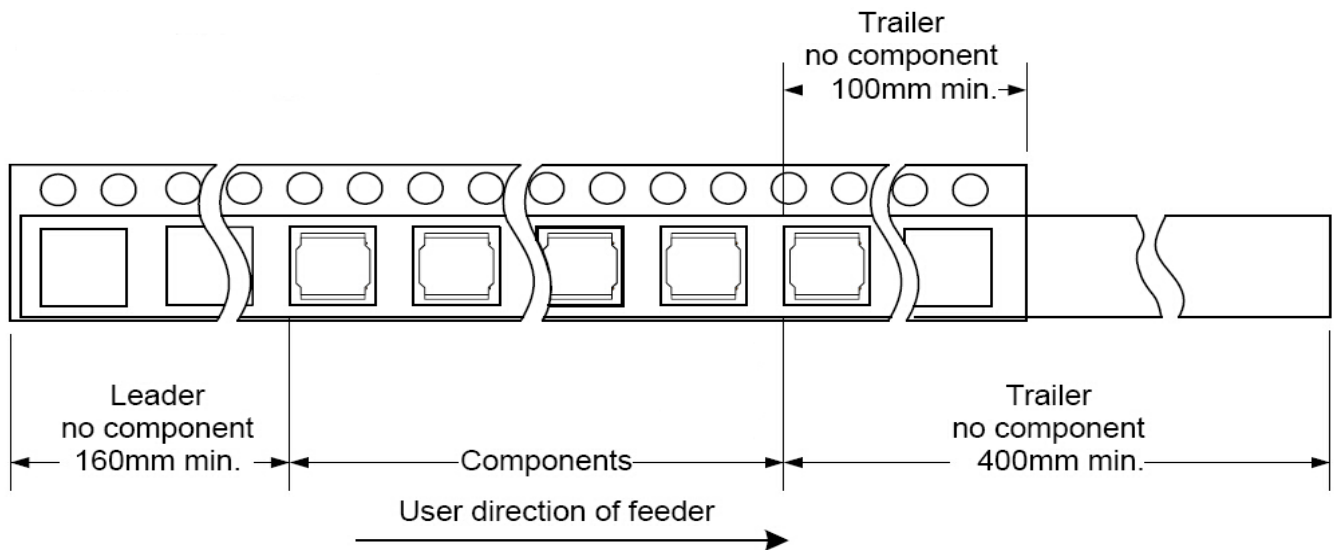
## ■ Reel Dimensions(Unit:mm)



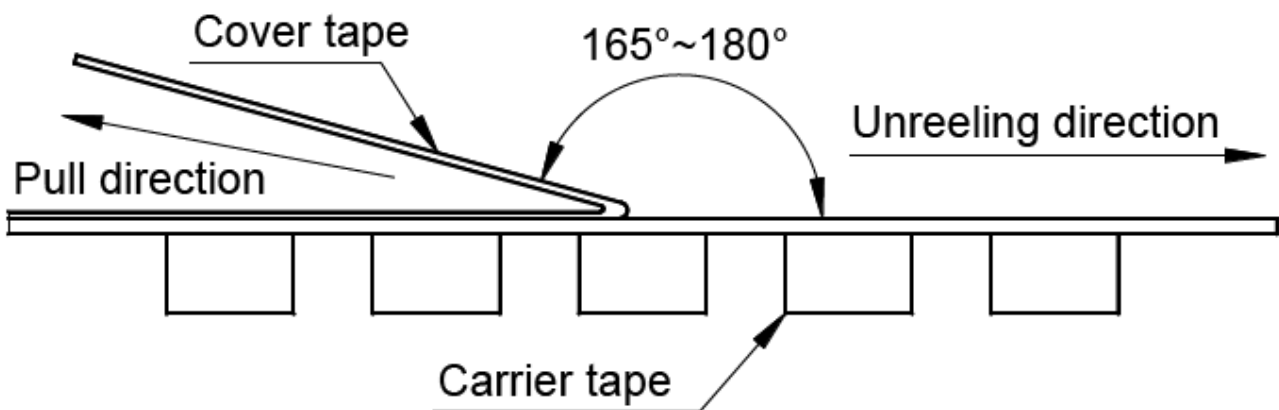
| TYPE     | W             | W1              | A               | B               | C              | D       |
|----------|---------------|-----------------|-----------------|-----------------|----------------|---------|
| ZYNR4018 | $330 \pm 2.0$ | $12.8 \pm 1.50$ | $13.0 \pm 0.50$ | $21.0 \pm 0.80$ | $2.0 \pm 0.50$ | 100 Min |



## ■ 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.

## 使用注意事项

### REMINDERS FOR USING THESE PRODUCTS



- 保存时间为12 个月以内，保存条件（温度5~40°C以下、湿度35 ~ 66%RH 以下），需充分注意。  
若超过保存时间，端子电极的可焊性将可能老化。

The storage period is within 12 months. Be sure to follow the storage conditions (temperature: 5~40°C, humidity: 35 to 65% RH or less). If the storage period elapses, the soldering of the terminal electrodes may deteriorate.

- 请勿在气体腐蚀环境（盐、酸、碱等）下使用和保存。

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

- 手上的油脂会导致可焊性降低，应避免用手直接接触端子。

Don't touch electrodes directly with bare hands as oil secretions may inhibit soldering. Always ensure optimum conditions for soldering.

- 请小心轻拿轻放,避免由于产品的跌落或取出不当而导致的损坏。

Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

- 端子过度弯曲会导致断线,请不要过度弯曲端子。

Don't bend the terminals with excessive stress in case of any wire fracture.

- 不要清洗产品，如需要清洗时请联系我司。

Don't rinse coils by yourself and please contact ZE if necessary.

- 请勿将本产品靠近磁铁或带有磁力的物体

Don't expose the products to magnets or magnetic fields

- 在实施焊接前，请务必进行预热。预热温度与焊接温度及芯片温度的温度差要在150°C 以内。

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.

- 安装后的焊接修正应在规格书规定的条件范围内。若加热过度可能导致短路、性能降低、寿命减少。

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

- 装置会因通电而自我发热（温度上升），因此在热设计方面需留有充分余地。

Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.

- 非磁屏蔽型在基板设计时需注意配置线圈，受到电磁干扰可能会导致误动作。

Carefully lay out the coil for the circuit board design of the non-magnetic shield type. A malfunction may occur due to magnetic interference.

- 当本公司产品使用在一般电子设备以外的场合,如:车载,医疗设备,军用,航空航天等,请务必联系本公司营业部门,如超出本公司产品使用条件而引起的机器故障时,本公司概不负责。

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