

# 零件承认书

SPECIFICATION FOR APPROVAL

客户名称: 0001

规格描述: ZYNR6028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 |
|----|----|----|
|    |    |    |



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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 systems Telecomm 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

③

M

④

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 |

③

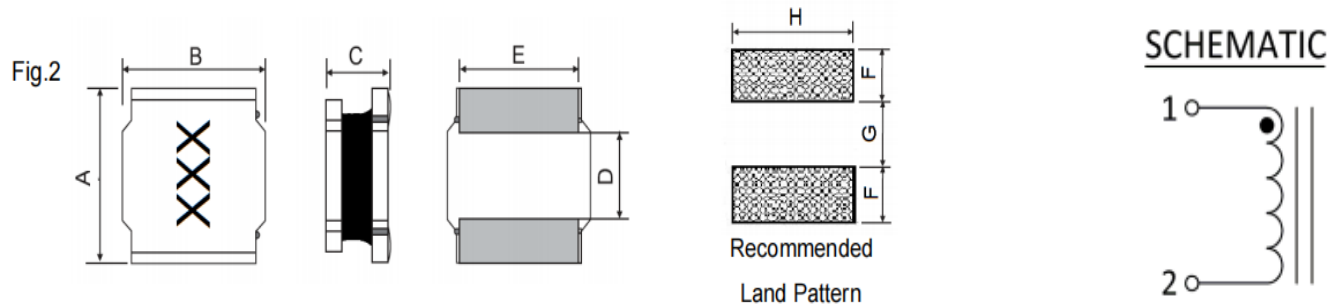
| Inductance |
|------------|
| 10 uH      |

④

| 公差 Inductance Tolerance                          |
|--------------------------------------------------|
| K: $\pm 10\%$ ,<br>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       |
| ZYNR6028 | Fig.2 | 6.0±0.3 | 6.0±0.3 | 3.0 Max | 2.9±0.3 | 4.9±0.3 | 1.7 Typ | 2.8 Typ | 5.7 Typ |



## ■ ZYNR6028 Series

| Part Number   | Inductance<br>(uH) @100KHz | DC Resistance ( $\Omega$ ) |       | 额定电流        | 饱和电流        |
|---------------|----------------------------|----------------------------|-------|-------------|-------------|
|               |                            | Typ.                       | Max.  | Current (A) | Current (A) |
| ZYNR6028-R82□ | 0.82                       | 0.012                      | 0.016 | 5.20        | 6.50        |
| ZYNR6028-1R0□ | 1.00                       | 0.010                      | 0.013 | 5.20        | 5.75        |
| ZYNR6028-1R2□ | 1.20                       | 0.013                      | 0.017 | 4.58        | 6.40        |
| ZYNR6028-1R5□ | 1.50                       | 0.013                      | 0.017 | 4.58        | 6.00        |
| ZYNR6028-2R2□ | 2.20                       | 0.020                      | 0.026 | 3.75        | 5.10        |
| ZYNR6028-2R7□ | 2.70                       | 0.020                      | 0.026 | 3.75        | 3.80        |
| ZYNR6028-3R3□ | 3.30                       | 0.025                      | 0.033 | 3.48        | 4.15        |
| ZYNR6028-4R7□ | 4.70                       | 0.030                      | 0.039 | 3.00        | 3.08        |
| ZYNR6028-5R6□ | 5.60                       | 0.043                      | 0.056 | 2.60        | 3.00        |
| ZYNR6028-6R2□ | 6.20                       | 0.047                      | 0.061 | 2.40        | 3.05        |
| ZYNR6028-6R8□ | 6.80                       | 0.047                      | 0.061 | 2.40        | 2.60        |
| ZYNR6028-8R2□ | 8.20                       | 0.055                      | 0.072 | 2.25        | 2.30        |
| ZYNR6028-9R1□ | 9.10                       | 0.074                      | 0.096 | 2.15        | 2.55        |
| ZYNR6028-100□ | 10.0                       | 0.072                      | 0.094 | 1.95        | 2.04        |
| ZYNR6028-120□ | 12.0                       | 0.080                      | 0.104 | 1.80        | 1.85        |
| ZYNR6028-150□ | 15.0                       | 0.125                      | 0.163 | 1.45        | 1.75        |
| ZYNR6028-180□ | 18.0                       | 0.120                      | 0.156 | 1.45        | 1.52        |
| ZYNR6028-220□ | 22.0                       | 0.140                      | 0.182 | 1.40        | 1.45        |
| ZYNR6028-270□ | 27.0                       | 0.155                      | 0.202 | 1.32        | 1.50        |
| ZYNR6028-330□ | 33.0                       | 0.185                      | 0.241 | 1.22        | 1.35        |
| ZYNR6028-360□ | 36.0                       | 0.215                      | 0.280 | 1.13        | 1.25        |
| ZYNR6028-390□ | 39.0                       | 0.225                      | 0.293 | 1.10        | 1.25        |
| ZYNR6028-470□ | 47.0                       | 0.315                      | 0.410 | 1.06        | 1.15        |



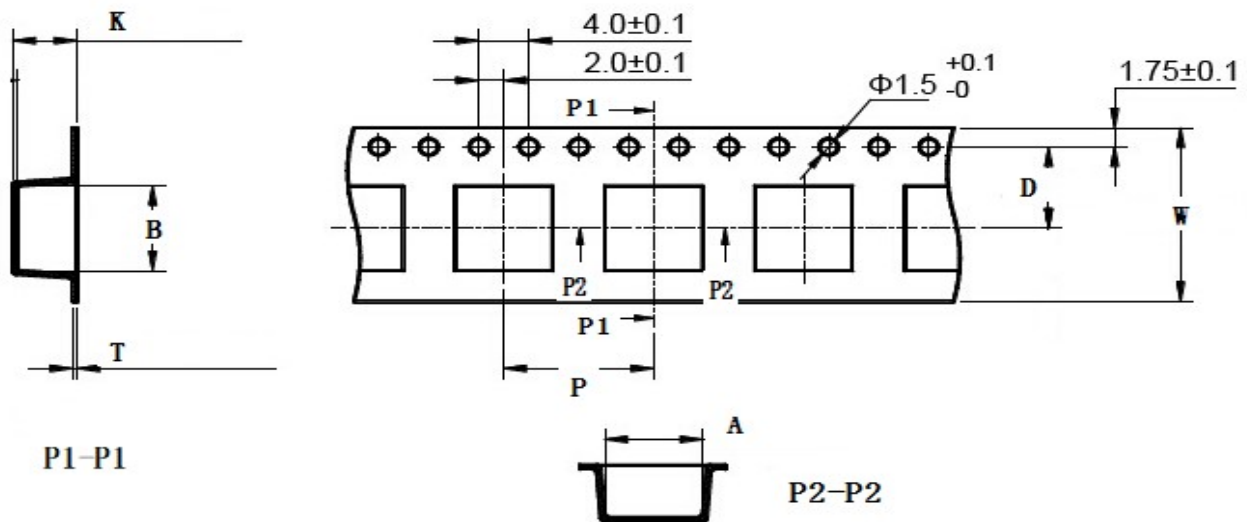
## ■ ZYNR6028 Series

| Part Number   | Inductance<br>(uH) @100KHz | DC Resistance ( $\Omega$ ) |       | 额定电流        | 饱和电流        |
|---------------|----------------------------|----------------------------|-------|-------------|-------------|
|               |                            | Typ.                       | Max.  | Current (A) | Current (A) |
| ZYNR6028-510□ | 51.0                       | 0.340                      | 0.442 | 0.80        | 1.00        |
| ZYNR6028-560□ | 56.0                       | 0.345                      | 0.449 | 0.89        | 1.05        |
| ZYNR6028-680□ | 68.0                       | 0.360                      | 0.468 | 0.80        | 0.86        |
| ZYNR6028-750□ | 75.0                       | 0.410                      | 0.533 | 0.81        | 0.90        |
| ZYNR6028-820□ | 82.0                       | 0.500                      | 0.650 | 0.70        | 0.80        |
| ZYNR6028-101□ | 100                        | 0.500                      | 0.650 | 0.65        | 0.70        |
| ZYNR6028-151□ | 150                        | 0.600                      | 0.780 | 0.50        | 0.70        |
| ZYNR6028-221□ | 220                        | 1.330                      | 1.729 | 0.40        | 0.50        |
| ZYNR6028-331□ | 330                        | 2.800                      | 3.640 | 0.30        | 0.35        |
| ZYNR6028-401□ | 400                        | 2.160                      | 2.808 | 0.30        | 0.40        |
| ZYNR6028-681□ | 680                        | 5.100                      | 6.630 | 0.23        | 0.24        |
| ZYNR6028-102□ | 1000                       | 5.800                      | 7.540 | 0.18        | 0.23        |

- ※ 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.

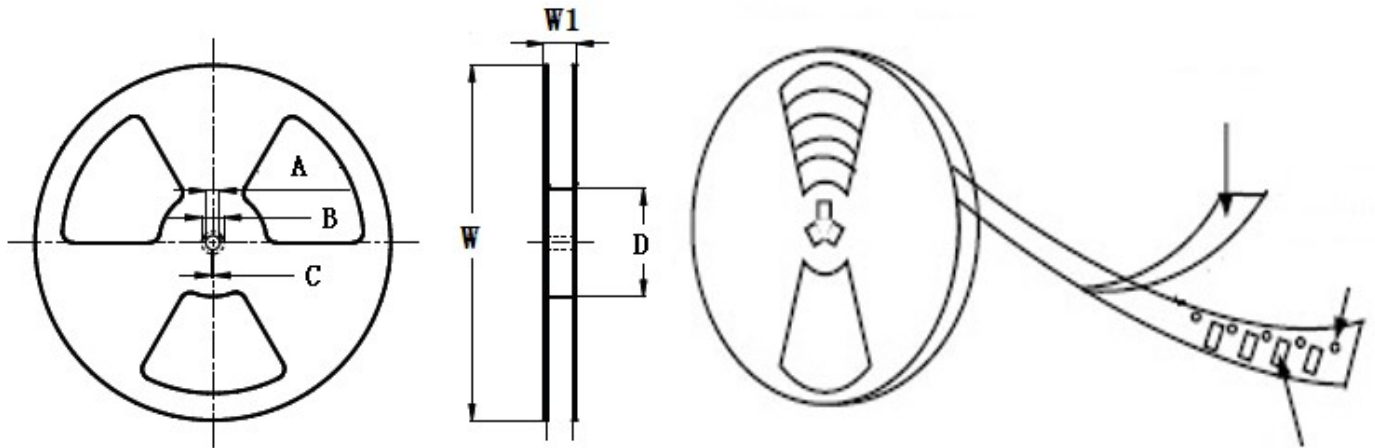


## ■ Taping Dimensions(Unit:mm)



| TYPE     | Chip Thickness | W    | A    | B    | D    | P    | K Max | T Max | MPQ  |
|----------|----------------|------|------|------|------|------|-------|-------|------|
| ZYNR6028 | 2.80           | 16.0 | 6.40 | 6.40 | 7.50 | 8.00 | 3.30  | 0.40  | 2000 |

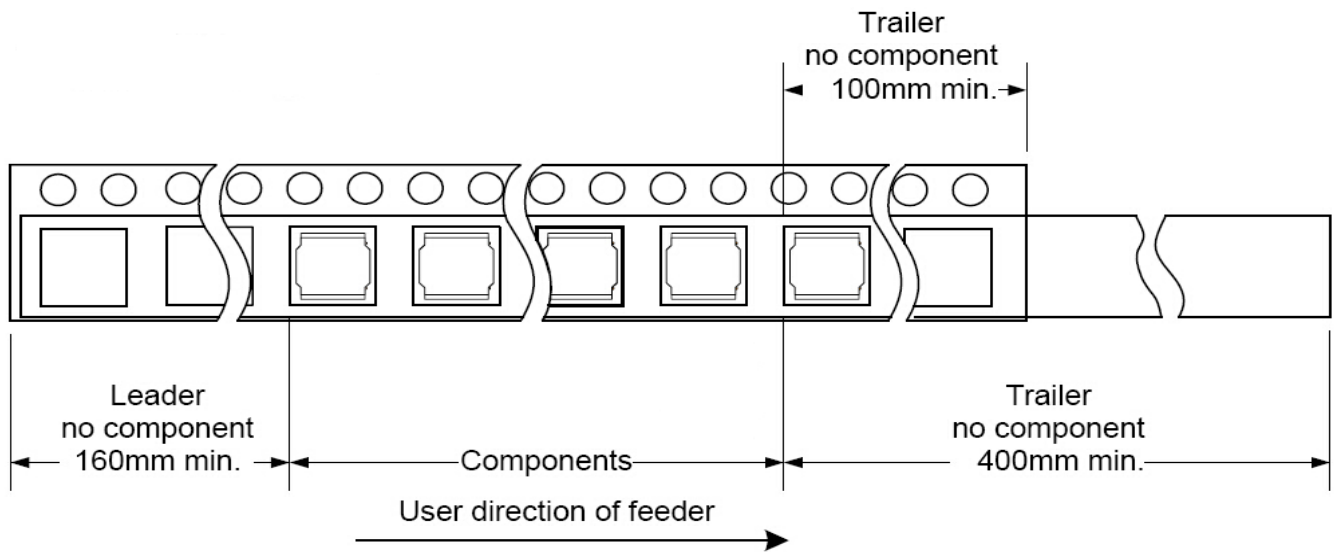
## ■ Reel Dimensions(Unit:mm)



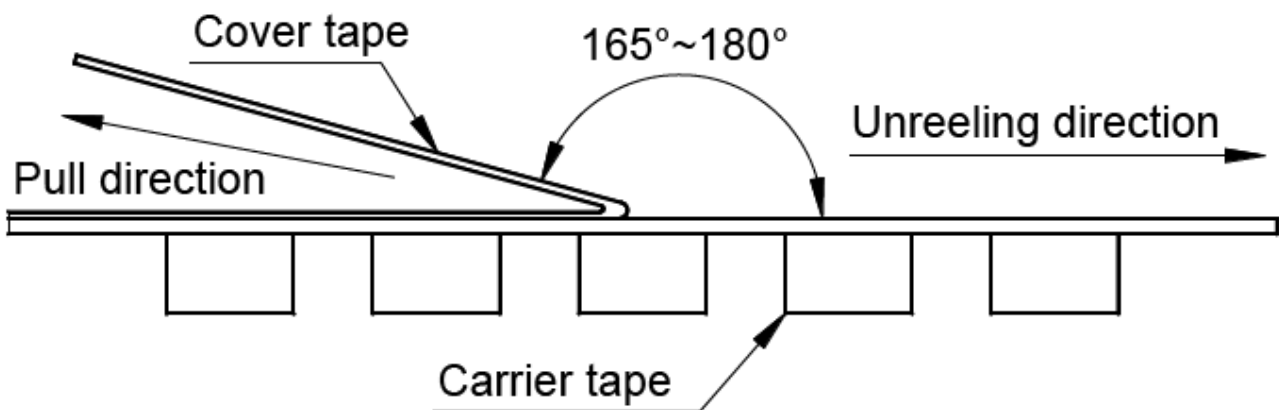
| TYPE     | W             | W1              | A               | B               | C              | D       |
|----------|---------------|-----------------|-----------------|-----------------|----------------|---------|
| ZYNR6028 | $330 \pm 2.0$ | $16.5 \pm 1.50$ | $13.0 \pm 0.50$ | $21.0 \pm 0.80$ | $2.0 \pm 0.50$ | 100 Min |



## ■ Direction of rolling



## ■ Cover tape peel off condition



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

Reference peel speed  $300 \pm 10$  mm/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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