

零件承认书

SPECIFICATION FOR APPROVAL

客户名称: 0001

规格描述: ZNR201610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

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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°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°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:

<u>ZNR</u> ①		<u>8040</u> ②	<u>S</u> ③	<u>100</u> ④	<u>M</u> ⑤	<u>I</u> ⑥
①		②		③		④
类型 Type		外形尺寸(L×W×H) (mm) External Dimensions (L×W×H) (mm)				Inductance
ZNR	闭磁路贴片磁胶电感 Shielded SMT Power Inductors 	8040		8.0×8.0×4.2		10 uH

③ Feature Type S:Standard

⑤

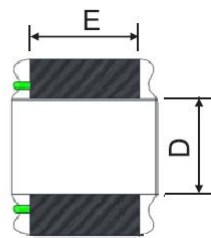
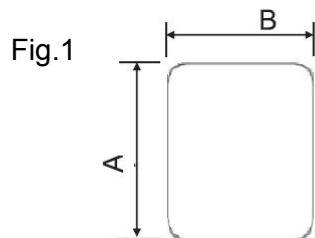
公差 Inductance Tolerance
K: $\pm 10\%$, M: $\pm 20\%$, N: $\pm 30\%$

⑥

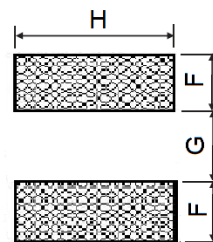
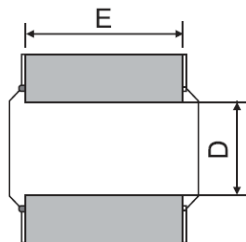
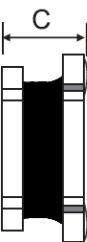
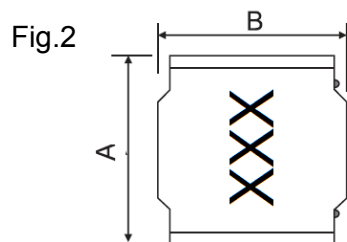
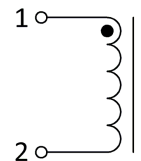
包装 Packing	
T	编带 Tape & Reel

◆外观尺寸:

Shape and Dimensions(dimensions are in mm):



SCHEMATIC

Recommended
Land Pattern

Part No	ITEM								
	Shap	A	B	C	D	E	F	G	H
ZNR201610S	Fig.1	2.0 $\pm$ 0.3	1.6 $\pm$ 0.3	1.08 Max	0.8 $\pm$ 0.2	1.0 $\pm$ 0.2	0.7 Typ	0.7 Typ	1.7 Typ

◆规格特性:

● ZNR201610 Series

Specifications:

Part No	Inductance 100KHz 0.25V		DCR (Ω)		Saturation Current	Temperature Rise Current
	L(μH) '@0A	Tol	Typical	Max	(A) Max	(A) Max
ZNR201610SR24MT	0.24	±20%	0.033	0.040	3.70	2.90
ZNR201610SR33MT	0.33	±20%	0.038	0.048	2.50	2.90
ZNR201610SR47MT	0.47	±20%	0.047	0.059	2.30	2.35
ZNR201610SR68MT	0.68	±20%	0.061	0.076	1.95	2.05
ZNR201610S1R0MT	1.0	±20%	0.091	0.114	1.65	1.45
ZNR201610S1R5MT	1.5	±20%	0.139	0.174	1.35	1.10
ZNR201610S2R2MT	2.2	±20%	0.211	0.264	1.20	1.10
ZNR201610S3R3MT	3.3	±20%	0.268	0.335	0.90	0.88
ZNR201610S4R7MT	4.7	±20%	0.383	0.479	0.74	0.70
ZNR201610S6R8MT	6.8	±20%	0.652	0.816	0.60	0.52
ZNR201610S100MT	10.0	±20%	0.816	1.020	0.50	0.45
ZNR201610S150MT	15.0	±20%	1.300	1.700	0.50	0.30
ZNR201610S220MT	22.0	±20%	1.400	1.700	0.30	0.32

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

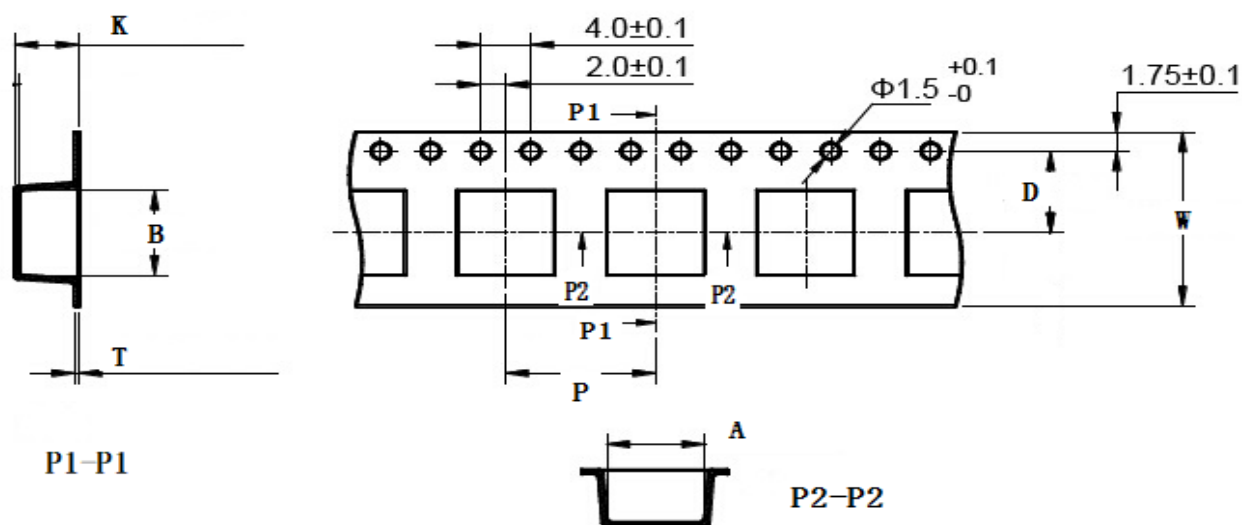
※ The temperature rise current value is the DC current value having temperature increase up to 40℃. (at 20℃)

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



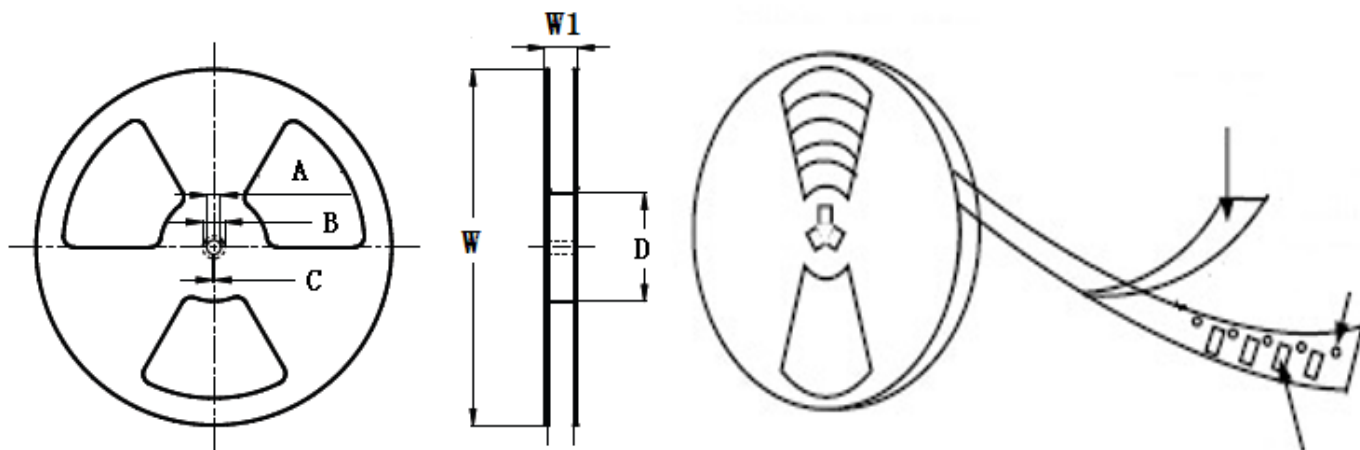
ZNR201610 Series

■ Taping Dimensions(Unit:mm)



TYPE	Chip Thickness	W	A	B	D	P	K Max	T Max	MPQ
ZNR201610	1.00	8.00	2.00	2.40	3.50	4.00	1.20	0.25	2000

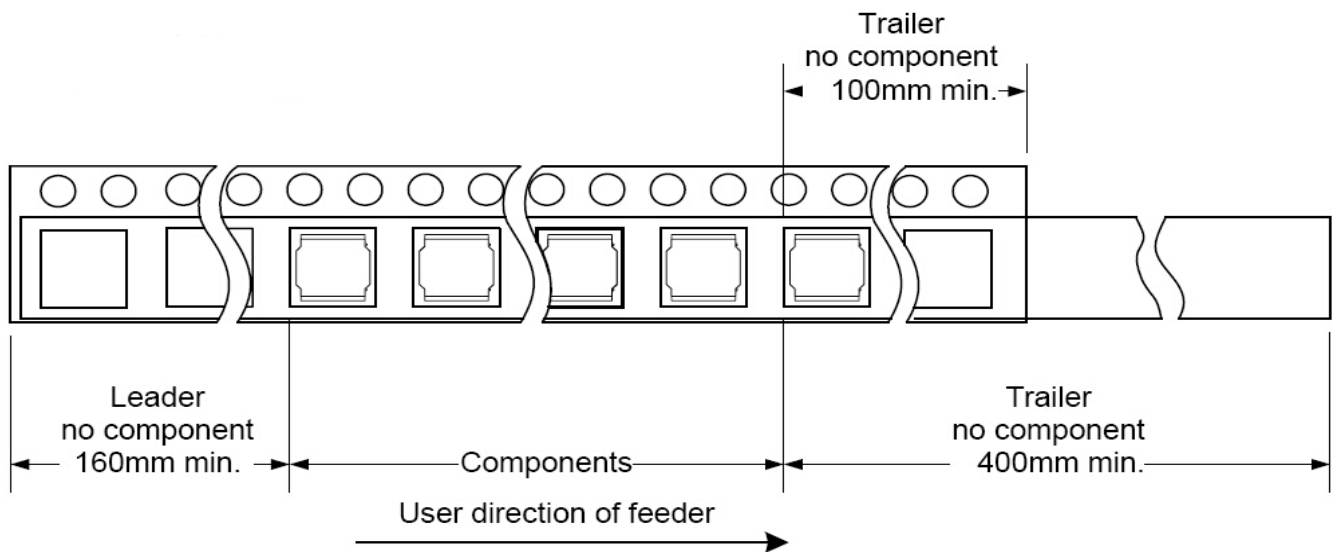
■ Reel Dimensions(Unit:mm)



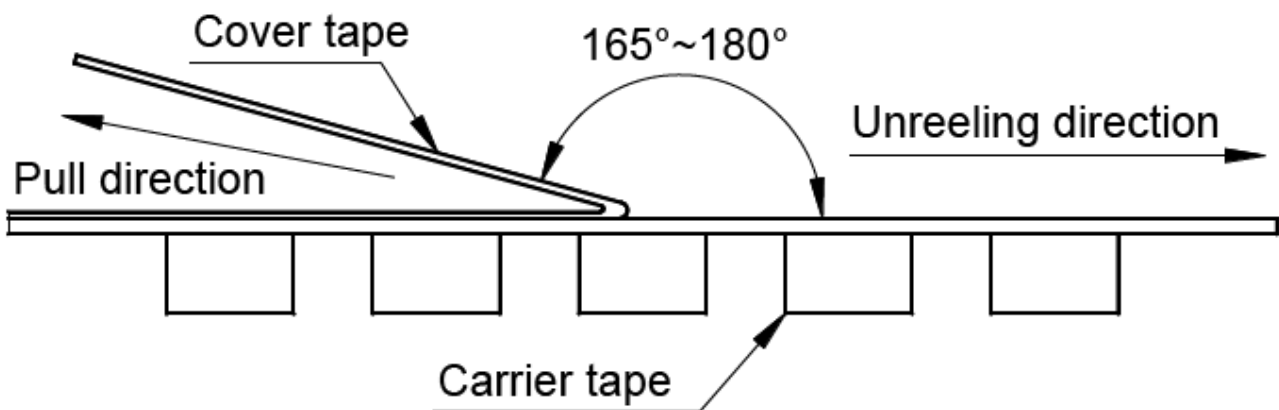
TYPE	W	W1	A	B	C	D
ZNR201610	178±2.0	8.40±1.50	4.3±0.20	5.0±0.10	3.0±0.10	58±2.0



■ Direction of rolling



■ Cover tape peel off condition



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

Reference peel speed 300 ± 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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