增 益 实 业

零 件 承 认 书

SPECIFICATION FOR APPROVAL

客户名称: 0001

规格描述: ZYNR8040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

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

◆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.

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

◆环境：

- 工作温度：-40℃ 至+125℃
  （包括线圈自身温升）

Environmental Data:

- Operating Temperature: -40℃ to +125℃
  (Including coils self-temperature rise)

◆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

Test Equipment:

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

◆产品型号：

Product Identification:

ZYNR	8040	---	100	M
①	②		③	④

①

类型 Type	
ZYNR	闭磁路贴片磁胶电感 Shielded SMT Power Inductors

②

外形尺寸(L×W×H) (mm) External Dimensions (L×W×H) (mm)	
8040	8.0×8.0×4.2

③

Inductance
10 uH

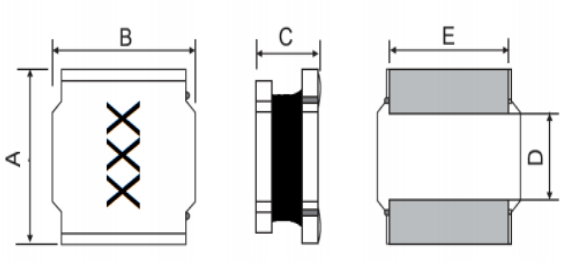
④

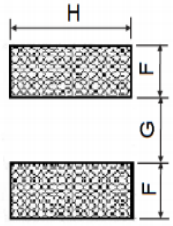
公差 Inductance Tolerance
K: ±10%, M: ±20%, N: ±30%

◆外观尺寸：

Shape and Dimensions(dimensions are in mm)：

Fig.2

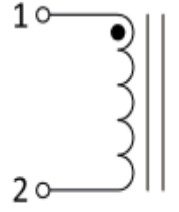




Recommended

Land Pattern

SCHEMATIC



Part No	ITEM								
	Shap	A	B	C	D	E	F	G	H
ZYNR8040	Fig.2	8.0±0.3	8.0±0.3	4.2 Max	4.0±0.3	6.3±0.3	2.2 Typ	3.8 Typ	7.5 Typ

■ZYNR8040 Series

Part Number	Inductance (uH) @100KHz	DC Resistance (Ω)		额定电流 Current (A)	饱和电流 Current (A)
		Typ.	Max.		
ZYNR8040-R82□	0.82	0.008	0.010	6.30	13.80
ZYNR8040-1R0□	1.00	0.008	0.010	6.30	9.85
ZYNR8040-1R2□	1.20	0.010	0.013	5.65	10.00
ZYNR8040-1R5□	1.50	0.010	0.013	5.65	8.15
ZYNR8040-2R0□	2.00	0.012	0.016	5.15	9.25
ZYNR8040-2R2□	2.20	0.012	0.016	5.15	7.10
ZYNR8040-3R0□	3.00	0.014	0.018	4.70	6.10
ZYNR8040-3R3□	3.30	0.017	0.022	4.40	6.50
ZYNR8040-3R6□	3.60	0.017	0.022	4.35	7.52
ZYNR8040-3R9□	3.90	0.017	0.022	4.35	5.75
ZYNR8040-4R7□	4.70	0.019	0.025	4.10	5.90
ZYNR8040-5R1□	5.10	0.019	0.025	4.05	4.70
ZYNR8040-5R6□	5.60	0.021	0.027	3.85	6.00
ZYNR8040-6R8□	6.80	0.024	0.031	3.60	4.55
ZYNR8040-8R2□	8.20	0.026	0.034	3.45	4.20
ZYNR8040-100□	10.0	0.029	0.038	3.30	3.60
ZYNR8040-120□	12.0	0.041	0.053	2.80	3.50
ZYNR8040-150□	15.0	0.047	0.061	2.60	2.95
ZYNR8040-180□	18.0	0.053	0.069	2.40	2.70
ZYNR8040-220□	22.0	0.069	0.090	2.10	2.40
ZYNR8040-270□	27.0	0.078	0.101	2.00	2.15
ZYNR8040-330□	33.0	0.097	0.126	1.80	2.05
ZYNR8040-360□	36.0	0.102	0.133	1.75	2.00
ZYNR8040-390□	39.0	0.107	0.138	1.70	1.95

■ZYNR8040 Series

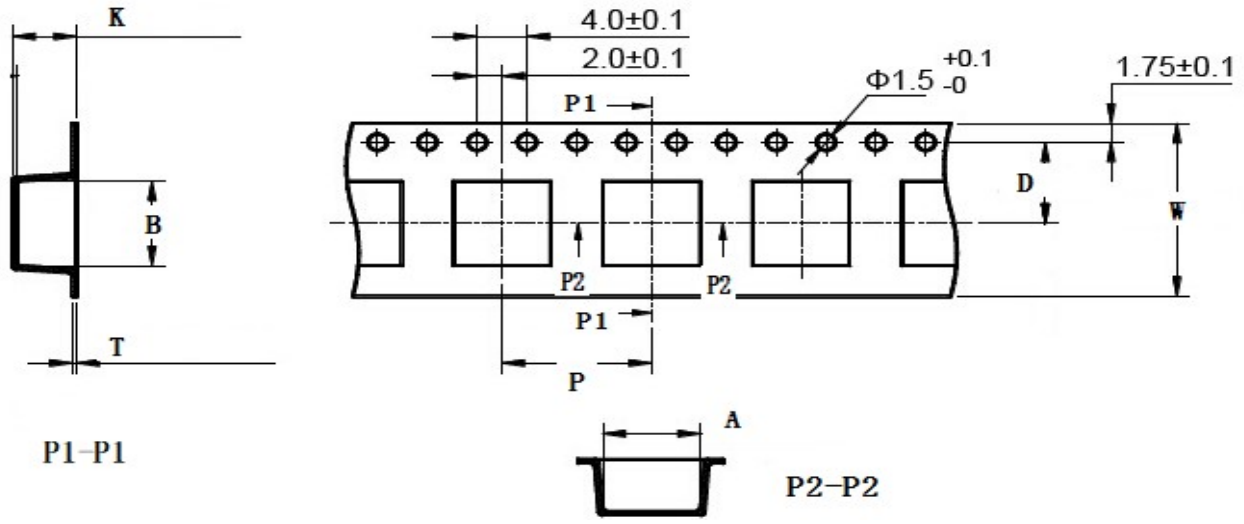
Part Number	Inductance (uH) @100KHz	DC Resistance (Ω)		额定电流 Current (A)	饱和电流 Current (A)
		Typ.	Max.		
ZYNR8040-430□	43.0	0.113	0.147	1.65	1.90
ZYNR8040-470□	47.0	0.136	0.177	1.55	1.75
ZYNR8040-510□	51.0	0.142	0.185	1.50	1.70
ZYNR8040-620□	62.0	0.182	0.237	1.30	1.50
ZYNR8040-680□	68.0	0.196	0.255	1.25	1.45
ZYNR8040-750□	75.0	0.211	0.274	1.20	1.35
ZYNR8040-820□	82.0	0.225	0.293	1.15	1.30
ZYNR8040-910□	91.0	0.272	0.354	1.05	1.20
ZYNR8040-101□	100	0.290	0.377	1.00	1.15
ZYNR8040-121□	120	0.334	0.434	0.95	1.05
ZYNR8040-151□	150	0.410	0.533	0.85	1.10
ZYNR8040-181□	180	0.520	0.676	0.83	0.95
ZYNR8040-221□	220	0.599	0.779	0.80	0.85
ZYNR8040-271□	270	0.750	0.975	0.75	0.80
ZYNR8040-331□	330	0.889	1.156	0.64	0.68
ZYNR8040-391□	390	0.860	1.118	0.60	0.53
ZYNR8040-471□	470	1.260	1.625	0.50	0.60
ZYNR8040-561□	560	1.790	2.327	0.47	0.50
ZYNR8040-681□	680	2.040	2.652	0.45	0.50
ZYNR8040-821□	820	2.800	3.640	0.35	0.53
ZYNR8040-102□	1000	2.800	3.640	0.35	0.40
ZYNR8040-152□	1500	5.000	6.500	0.26	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℃)

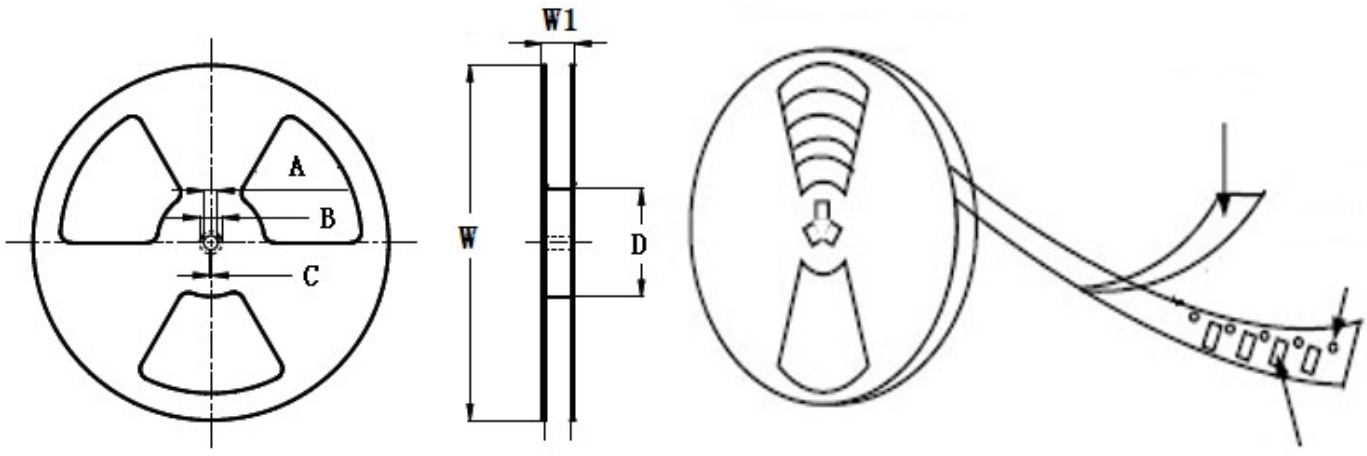
※ The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

■ Taping Dimensions(Unit:mm)



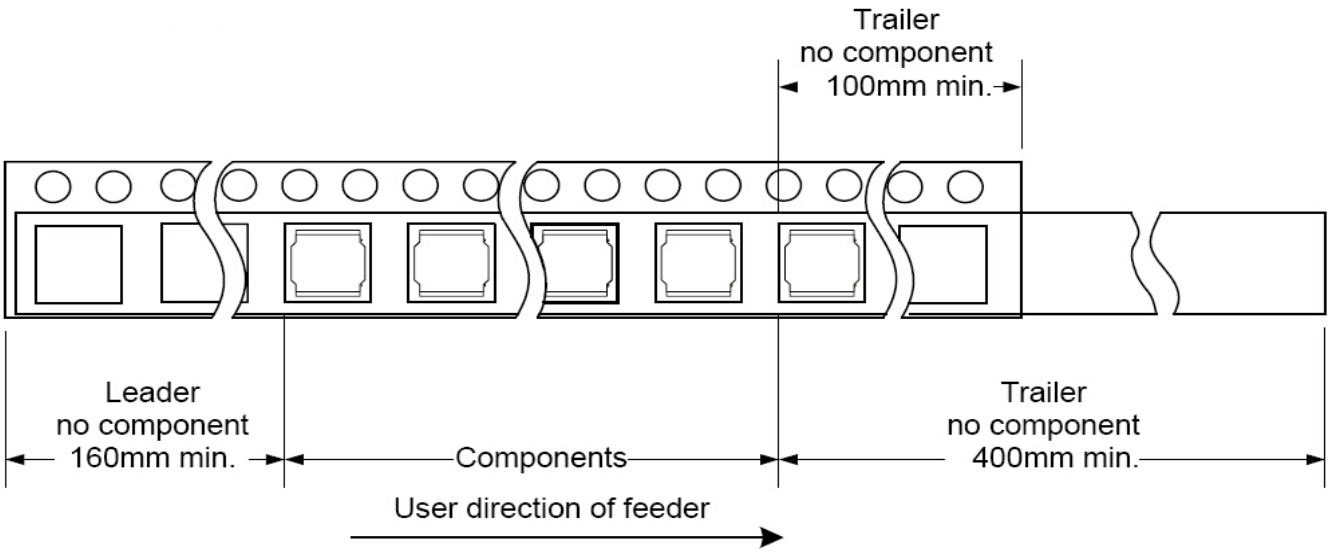
TYPE	Chip Thickness	W	A	B	D	P	K Max	T Max	MPQ
ZYNR8040	4.00	16.0	8.35	8.35	7.50	12.0	4.50	0.40	1000

■ Reel Dimensions(Unit:mm)

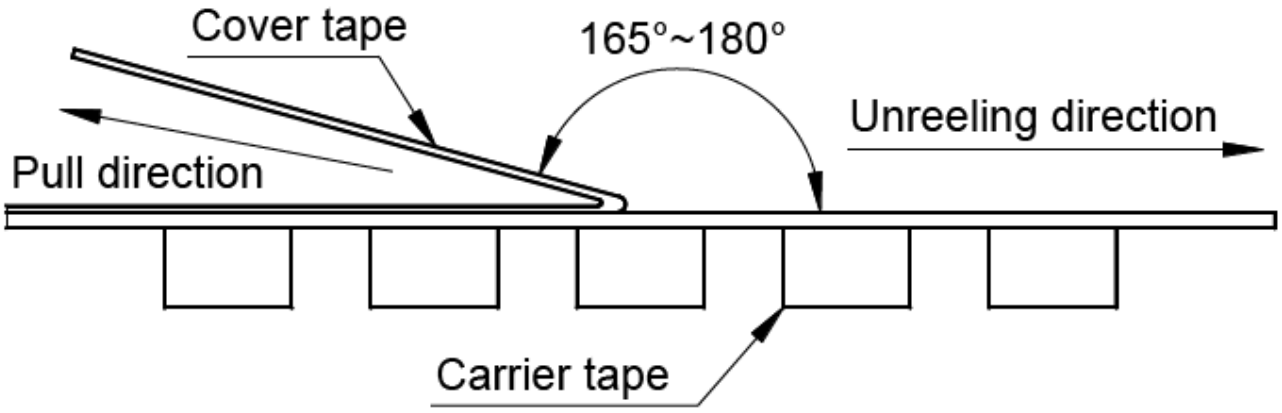


TYPE	W	W1	A	B	C	D
ZYNR8040	330±2.0	16.5±1.50	13.0±0.50	21.0±0.80	2.0±0.50	100 Min

■ 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 bydropping 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.
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