



零件承认书

SPECIFICATION FOR APPROVAL

客户名称: 0110规格描述: ZENR8040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

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 systems Telecomm 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:

ZENR 8040 T100 M - 10uH

① ②

①	
类型 Type	
ZENR	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	8.0×8.0×4.0

Inductance
10 uH

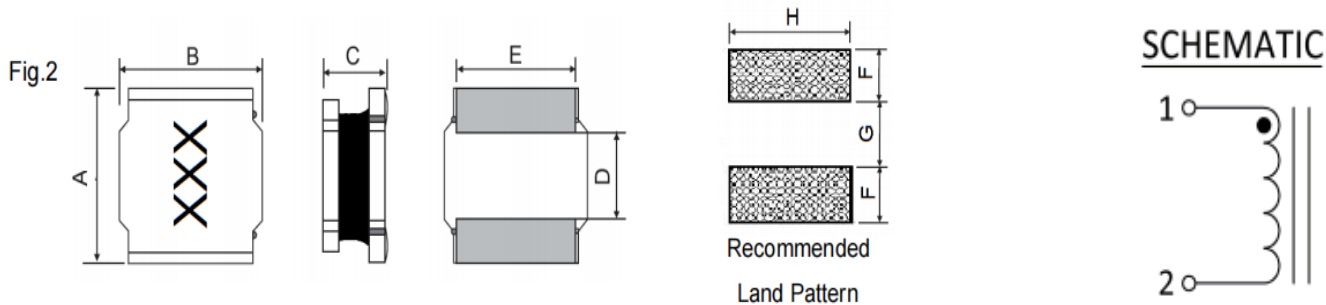
T: 编带

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

感量注释

◆外观尺寸:

Shape and Dimensions(dimensions are in mm):



Part No	ITEM								
	Shap	A	B	C	D	E	F	G	H
ZENR8040	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



ZENR8040 系列

Part Number	Inductance (uH)@100KHz	DC Resistance (Ω)		额定电流 Current (A)	饱和电流 Current (A)
		Typ.	Max.		
ZENR8040TR82N-820nH	0.82	0.008	0.010	6.30	13.80
ZENR8040T1R0M-1uH	1.00	0.008	0.010	6.30	9.85
ZENR8040T1R2N-1.2uH	1.20	0.010	0.013	5.65	10.00
ZENR8040T1R5M-1.5uH	1.50	0.010	0.013	5.65	8.15
ZENR8040T2R0N-2uH	2.00	0.012	0.016	5.15	9.25
ZENR8040T2R2N-2.2uH	2.20	0.012	0.016	5.15	7.10
ZENR8040T2R2M-2.2uH	2.20	0.012	0.016	5.15	7.10
ZENR8040T3R0N-3uH	3.00	0.014	0.018	4.70	6.10
ZENR8040T3R3N-3.3uH	3.30	0.017	0.022	4.40	6.50
ZENR8040T3R3M-3.3uH	3.30	0.017	0.022	4.40	6.50
ZENR8040T3R6N-3.6uH	3.60	0.017	0.022	4.35	7.52
ZENR8040T3R9N-3.9uH	3.90	0.017	0.022	4.35	5.75
ZENR8040T4R7N-4.7uH	4.70	0.019	0.025	4.10	5.90
ZENR8040T4R7M-4.7uH	4.70	0.019	0.025	4.10	5.90
ZENR8040T5R1N-5.1uH	5.10	0.019	0.025	4.05	4.70
ZENR8040T5R6N-5.6uH	5.60	0.021	0.027	3.85	6.00
ZENR8040T6R8M-6.8uH	6.80	0.024	0.031	3.60	4.55
ZENR8040T8R2M-8.2uH	8.20	0.026	0.034	3.45	4.20
ZENR8040T100M-10uH	10.0	0.029	0.038	3.30	3.60
ZENR8040T120M-12uH	12.0	0.041	0.053	2.80	3.50
ZENR8040T150M-15uH	15.0	0.047	0.061	2.60	2.95
ZENR8040T180M-18uH	18.0	0.053	0.069	2.40	2.70
ZENR8040T220M-22uH	22.0	0.069	0.090	2.10	2.40
ZENR8040T270M-27uH	27.0	0.078	0.101	2.00	2.15
ZENR8040T330M-33uH	33.0	0.097	0.126	1.80	2.05
ZENR8040T360M-36uH	36.0	0.102	0.133	1.75	2.00
ZENR8040T390M-39uH	39.0	0.107	0.138	1.70	1.95



ZENR8040 系列

Part Number	Inductance (μH)@100KHz	DC Resistance (Ω)		额定电流 Current (A)	饱和电流 Current (A)
		Typ.	Max.		
ZENR8040T430M-43 μH	43.0	0.113	0.147	1.65	1.90
ZENR8040T470M-47 μH	47.0	0.136	0.177	1.55	1.75
ZENR8040T510M-51 μH	51.0	0.142	0.185	1.50	1.70
ZENR8040T620M-62 μH	62.0	0.182	0.237	1.30	1.50
ZENR8040T680M-68 μH	68.0	0.196	0.255	1.25	1.45
ZENR8040T750M-75 μH	75.0	0.211	0.274	1.20	1.35
ZENR8040T820M-82 μH	82.0	0.225	0.293	1.15	1.30
ZENR8040T910M-91 μH	91.0	0.272	0.354	1.05	1.20
ZENR8040T101M-100 μH	100	0.290	0.377	1.00	1.15
ZENR8040T121M-120 μH	120	0.334	0.434	0.95	1.05
ZENR8040T151M-150 μH	150	0.410	0.533	0.85	1.10
ZENR8040T181M-180 μH	180	0.520	0.676	0.83	0.95
ZENR8040T221M-220 μH	220	0.599	0.779	0.80	0.85
ZENR8040T271M-270 μH	270	0.750	0.975	0.75	0.80
ZENR8040T331M-330 μH	330	0.889	1.156	0.64	0.68
ZENR8040T391M-390 μH	390	0.860	1.118	0.60	0.53
ZENR8040T471M-470 μH	470	1.260	1.625	0.50	0.60
ZENR8040T561M-560 μH	560	1.790	2.327	0.47	0.50
ZENR8040T681M-680 μH	680	2.040	2.652	0.45	0.50
ZENR8040T821M-820 μH	820	2.800	3.640	0.35	0.53
ZENR8040T102M-1mH	1000	2.800	3.640	0.35	0.40
ZENR8040T152M-1.5mH	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°C)

※ The temperature rise current value is the DC current value having temperature increase up to 40°C. (at20°C)

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

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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