增 益 实 业

零 件 承 认 书

SPECIFICATION FOR APPROVAL

客户名称: 0001

规格描述: ZENR6045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 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:

ZENR	8040	T100	M	-	47uH
①	②	③	④		⑤

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

③

Inductance
10 uH

T:编带

④

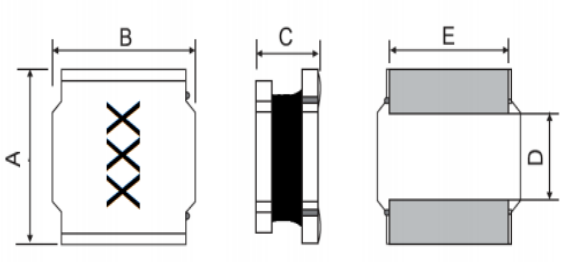
公差 Inductance Tolerance
K: ±10%, M: ±20%, N: ±30%

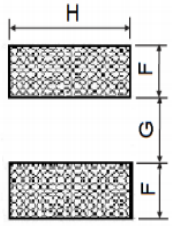
⑤ 感量注释

◆外观尺寸：

Shape and Dimensions(dimensions are in mm)：

Fig.2

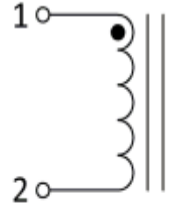




Recommended

Land Pattern

SCHEMATIC



Part No	ITEM								
	Shap	A	B	C	D	E	F	G	H
ZENR6045	Fig.2	6.0±0.3	6.0±0.3	4.5 Max	2.9±0.3	4.9±0.3	1.7 Typ	2.8 Typ	5.7 Typ

ZENR6045 系列

Part Number	Inductance (uH)@100KHz	DC Resistance (Ω)		额定电流 Current (A)	饱和电流 Current (A)
		Typ.	Max.		
ZENR6045TR47N-470nH	0.47	0.006	0.008	6.50	15.000
ZENR6045TR56N-560nH	0.56	0.006	0.008	6.50	14.000
ZENR6045TR68N-680nH	0.68	0.006	0.008	5.70	11.000
ZENR6045TR82N-820nH	0.82	0.008	0.010	5.90	10.350
ZENR6045T1R0N-1uH	1.00	0.011	0.014	5.14	9.850
ZENR6045T1R5N-1.5uH	1.50	0.012	0.016	4.95	8.800
ZENR6045T1R8N-1.8uH	1.80	0.012	0.016	4.95	7.600
ZENR6045T2R2N-2.2uH	2.20	0.014	0.018	4.60	6.750
ZENR6045T2R2M-2.2uH	2.20	0.014	0.018	4.60	6.750
ZENR6045T2R7N-2.7uH	2.70	0.015	0.020	4.30	5.750
ZENR6045T3R0N-3uH	3.00	0.020	0.026	3.80	5.600
ZENR6045T3R3N-3.3uH	3.30	0.021	0.027	3.70	5.900
ZENR6045T3R6N-3.6uH	3.60	0.021	0.027	3.70	5.250
ZENR6045T4R7M-4.7uH	4.70	0.026	0.034	3.30	4.970
ZENR6045T5R6M-5.6uH	5.60	0.029	0.038	3.15	4.150
ZENR6045T6R2M-6.2uH	6.20	0.031	0.040	3.00	4.430
ZENR6045T6R8M-6.8uH	6.80	0.031	0.040	3.00	3.900
ZENR6045T7R5M-7.5uH	7.50	0.034	0.044	2.90	3.500
ZENR6045T8R2M-8.2uH	8.20	0.043	0.056	2.60	3.900
ZENR6045T9R1M-9.1uH	9.10	0.043	0.056	2.60	3.350
ZENR6045T100M-10uH	10.0	0.048	0.062	2.45	3.200
ZENR6045T120M-12uH	12.0	0.058	0.075	2.20	2.800
ZENR6045T150M-15uH	15.0	0.068	0.088	2.05	2.500
ZENR6045T180M-18uH	18.0	0.081	0.105	1.85	2.200

ZENR6045 系列

Part Number	Inductance (uH)@100KHz	DC Resistance(Ω)		额定电流 Current (A)	饱和电流 Current (A)
		Typ.	Max.		
ZENR6045T220M-22uH	22.0	0.089	0.116	1.80	2.050
ZENR6045T270M-27uH	27.0	0.102	0.133	1.65	1.900
ZENR6045T300M-30uH	30.0	0.132	0.172	1.50	1.700
ZENR6045T330M-33uH	33.0	0.137	0.178	1.45	1.650
ZENR6045T360M-36uH	36.0	0.173	0.225	1.40	1.620
ZENR6045T390M-39uH	39.0	0.180	0.234	1.25	1.500
ZENR6045T430M-43uH	43.0	0.200	0.260	1.20	1.630
ZENR6045T470M-47uH	47.0	0.200	0.260	1.20	1.400
ZENR6045T510M-51uH	51.0	0.207	0.269	1.15	1.350
ZENR6045T560M-56uH	56.0	0.221	0.287	1.10	1.300
ZENR6045T620M-62uH	62.0	0.235	0.306	1.10	1.250
ZENR6045T680M-68uH	68.0	0.289	0.376	1.00	1.200
ZENR6045T750M-75uH	75.0	0.305	0.397	0.95	1.150
ZENR6045T820M-82uH	82.0	0.341	0.443	0.90	1.050
ZENR6045T910M-91uH	91.0	0.359	0.467	0.85	1.000
ZENR6045T101M-100uH	100	0.433	0.563	0.80	0.950
ZENR6045T121M-120uH	120	0.484	0.629	0.77	0.850
ZENR6045T151M-150uH	150	0.580	0.754	0.70	0.800
ZENR6045T221M-220uH	220	0.834	1.084	0.59	0.700
ZENR6045T271M-270uH	270	1.096	1.425	0.55	0.650
ZENR6045T331M-330uH	330	1.270	1.651	0.57	0.570
ZENR6045T391M-390uH	390	1.800	2.340	0.40	0.500
ZENR6045T471M-470uH	470	1.800	2.340	0.42	0.500

ZENR6045 系列

Part Number	Inductance (uH)@100KHz	DC Resistance (Ω)		额定电流 Current (A)	饱和电流 Current (A)
		Typ.	Max.		
ZENR6045T561M-560uH	560	2.480	3.224	0.33	0.460
ZENR6045T681M-680uH	680	2.500	3.250	0.33	0.420
ZENR6045T751M-750uH	750	3.700	4.810	0.30	0.400
ZENR6045T821M-820uH	820	3.700	4.810	0.30	0.360
ZENR6045T102M-1mH	1000	4.500	5.850	0.30	0.300
ZENR6045T152M-1.5mH	1500	6.750	8.100	0.21	0.240
ZENR6045T202M-2mH	2000	9.700	11.640	0.175	0.210
ZENR6045T222M-2.2mH	2200	10.000	12.000	0.169	0.205
ZENR6045T222K-2.2mH	2200	10.000	12.000	0.169	0.205
ZENR6045T252M-2.5mH	2500	10.570	12.680	0.167	0.200
ZENR6045T332K-3.3mH	3300	13.000	15.300	0.150	0.170
ZENR6045T332M-3.3mH	3300	13.000	15.300	0.150	0.170
ZENR6045T472M-4.7mH	4700	18.750	22.500	0.120	0.150
ZENR6045T472K-4.7mH	4700	18.750	22.500	0.120	0.150
ZENR6045T103K-10mH	10000	40.000	48.000	0.08	0.100
ZENR6045T103M-10mH	10000	40.000	48.000	0.08	0.100

※ 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℃.
(at20℃)

※ 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 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.
- 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,请务必联繫本公司营业部门,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。
  If ZE product will be applied in area like automotive product, medical equipment, military and aerospace except generalelectronic device, please keep ZE sales informed in advance. ZE shall not be held liable for any malfunction or breakdowncaused by using product in the condition which is inconsistent with that recommended by ZE。