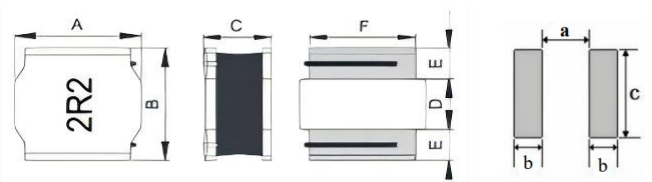


产品图示 Product illustration	尺寸 Dimensions
	

(Unit:mm)

Series	A	B	C	D	E	F	a	b	c
PNR4020	4.0±0.2	4.0±0.2	2.0 Max	2.1±0.2	0.95±0.2	3.3±0.2	1.9	1.1	3.7

环境数据	Environmental Data
工作温度范围:-40°C 至+125°C(环境温度加自温升)	Operating temperature range: -40°C to +125°C(ambient plus self-temperature rise)
焊接回流温度:符合 J-STD-020D 标准	Solder reflow temperature: J-STD-020D compliant

特征	Description
磁性胶水涂敷结构极大减少了蜂鸣声	Magnetic-resin shielded Construction reduces buzz noise to ultra-low levels
在磁芯上金属化电极, 抗跌落冲击强, 经久耐用	Metallization on ferrite core results in excellent shock resistance and Features damage-free durability
闭合磁路结构设计, 漏磁少, 抗 EMI 能力强	Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
电流特性较同等尺寸传统电感高出 30%以上	30% higher current rating than conventional inductors of equal sizeux
省空间, 更省电	Takes up less PCB real estate and save more power

应用领域	Applications
智能手机、智能电视、机顶盒、笔记本电脑	Smart phone, smart TV, set top box, notebook
车载导航影音、通讯设备	Car navigation systems, telecom base stations
虚拟现实、增强现实	VR,AR
LED 照明	LED lighting
固态硬盘、蓝牙、WIFI 模块	SSD, Bluetooth, Wi-Fi module
物联网模块、蓝牙耳机、智能音箱	NB-IOT, Bluetooth headset, Smartspeakers

■ 产品命名规则 Product Naming Rules

系列名称 Series	尺寸 Dimensions	电感值 Inductance Value	电感公差 Inductance Tolerance
PNR	4020	1R0	K=±10% M=±20% N=±30%

■ 关键电气参数规格表 Key Electrical Parameter Specification Table

型号 Part Number	电感 Inductance	直流电阻 DC Resistance		自谐振频率 Self-resonant Frequency	饱和电流 Saturation Current		温升电流 Heating Rating Current	
	L(μH)	DCR (Ω)		S.R.F(MHz)	Isat (A)		Irms (A)	
	100kHz,1V	Max.	Typ.	Min.	Max.	Typ	Max.	Typ
PNR4020-R24-M	0.24±20%	0.014	0.011	283	10.5	12.5	4.50	5.20
PNR4020-R33-N	0.33±30%	0.016	0.013	223	7.50	8.50	3.30	4.90
PNR4020-R47-N	0.47±30%	0.029	0.022	160	7.00	7.50	3.30	3.70
PNR4020-R68-N	0.68±30%	0.036	0.028	120	6.40	6.60	2.80	3.30
PNR4020-1R0-N	1.0±30%	0.038	0.029	75	4.78	5.20	2.15	3.20
PNR4020-1R2-N	1.2±30%	0.038	0.029	72	5.10	5.60	2.15	3.20
PNR4020-1R5-N	1.5±30%	0.046	0.035	71	4.45	4.90	1.98	3.00
PNR4020-2R2-N	2.2±30%	0.052	0.040	49	3.40	3.70	1.85	2.80
PNR4020-3R3-M	3.3±20%	0.091	0.070	44	3.20	3.50	1.40	2.50
PNR4020-3R6-M	3.6±20%	0.072	0.055	49	2.80	3.00	1.54	2.50
PNR4020-4R7-M	4.7±20%	0.098	0.075	42	2.35	2.50	1.34	2.00
PNR4020-5R1-M	5.1±20%	0.111	0.085	42	2.30	2.50	1.27	1.80
PNR4020-5R6-M	5.6±20%	0.117	0.090	30	2.20	2.40	1.22	1.80
PNR4020-6R2-M	6.2±20%	0.150	0.115	36	2.15	2.30	1.08	1.60
PNR4020-6R8-M	6.8±20%	0.163	0.125	33	2.20	2.40	1.04	1.60
PNR4020-7R5-M	7.5±20%	0.150	0.115	30	1.85	2.00	1.08	1.50
PNR4020-8R2-M	8.2±20%	0.163	0.125	27	1.75	1.90	1.04	1.40
PNR4020-100-M	10±20%	0.215	0.165	26	1.60	1.70	0.90	1.20
PNR4020-120-M	12±20%	0.228	0.175	26	1.50	1.60	0.88	1.20
PNR4020-150-M	15±20%	0.299	0.230	24	1.35	1.50	0.77	1.10
PNR4020-220-M	22±20%	0.455	0.350	15	1.05	1.10	0.62	0.87
PNR4020-270-M	27±20%	0.709	0.545	14	1.02	1.10	0.50	0.70

备注(Notes):

(1) 所有测试数据均以 25°C 环境温度为基准。

All test data is referenced to 25°C ambient.

(2) 当向线圈施加温升电流 (Idc) 时, 会导致约 40°C 的温升(ΔT)。

When applying the heat rating current DC (Idc) to coil, it will cause an approximate ΔT of 40°C .

(3) 当向线圈施加饱和电流直流 (Isat) 时, 初始电感值将下降约 30% (典型值)

When applying the saturation current DC (Isat) to coil, it will cause the initial inductance value to drop 30% Typical.

(4) 工作温度范围: -40°C 至 $+125^{\circ}\text{C}$ 。

Operating Temperature Range -40°C to $+125^{\circ}\text{C}$.

(5) 额定电流: 以 I_{sat} (最大值) 或 I_{rms} (典型值) 中较小者为准。

Rated current: I_{sat} (Max.) or I_{rms} (Typ.), whichever is smaller.

(6) 饱和电流: 典型值, 指使电感值较无电流状态下降约 30%的直流电流。

Saturation Current: Typ. Value, DC current at which the inductance drops approximately 30% from its value without current;

(7) 温升电流: 指在 20°C 环境温度下导致约 40°C 温升(ΔT)时对应的直流电流。

Heat Rating Current: DC current that causes an approximate ΔT of 40°C from 20°C ambient.

■ 储存条件/注意的事项 Storage conditions/Matters need attention

a、保存条件: 温度 5°C ~ 40°C , 相对湿度低于 60%

Storage conditions: 5°C ~ 40°C and less than 60% RH;

b、产品在 12 个月内使用(注意:产品一经拆开包装,须尽快使用)

Products should be used within 12 months.(Note that the product should be used as soon as possible once it is folded);

c、包装材料应保存在空气中不存在氯或硫的地方;

The packaging material should kept where no chlorine or sulfur exists in the air;

d、不要用手指触摸电极(焊接端子),因为这可能导致焊接能力的下降;

Do not touch the electrodes (soldering terminals) with fingers as this may lead to deterioration of solder ability;

e、个别零件强烈建议使用镊子或真空取料机, 散装搬运应确保尽量减少磨损和机械冲击;

The use of tweezers or vacuum pick-ups is strongly recommended for individual components. Bulk handling should ensure that abrasion and mechanical shock are minimized;