



IKP ELECTRONICS CO., LTD.

COMPANY PROFILE

IKP is a premium supplier of power inductor solutions and products that combine R&D, production and sales.

Relying on continuous independent innovation, IKP has independent design, R&D, production technology and high-quality customer resources in the field of inductors and transformers for digital amplifier.

After 20 years of development, IKP has a wide range of product specifications and models. The main products are SMD/SMT high current power chokes, DM chokes, CM chokes, line filters and transformers. Application areas are charging piles, solar energy, inverters, electric vehicles, switching power supplies, household appliances, communications equipment, industrial equipment and adapters.

IKP has an experienced team, advanced production equipment and testing equipment, and strict manufacturing processes. Our high quality products are trusted by customers in more than 30 countries around the world.

Relying on professional technology and high-quality products, IKP carefully builds excellent brands in the component industry and is committed to the common development of customers, employees and society.



ABOUT CLASS D INDUCTORS



Class D inductor, also known as inductor for digital amplifier, or special inductor for digital amplifier, is used in the circuit of digital power amplifier to play the role of audio filtering and choke, so that the power amplifier maintains high sound quality and low distortion.



Digital power amplifiers are incomparable with traditional power amplifiers in terms of sound quality transparency, resolution, and low-frequency shock. Theoretically, the efficiency of the digital power amplifier can reach 100% with the ideal electronic components.



Traditional I-shaped inductors, toroidal inductors and chip inductors have improved the efficiency of digital power amplifiers. The new type inductor uses Mn-zn ferrite material and special structure, which has excellent shielding effect and working efficiency. In addition, its linearity is better than that of a toroidal inductor in terms of

audio filtering. So it is widely used by speaker and amplifier companies in the world.

Product Specification List:

MODEL	SIZE L*W*H (mm)	INDUCTANCE (μ H)	Saturation Current (A)	Operation Temperature Range
DP1010	10.0*9.0*10.0	3.3~22.0	3.5~5.0	-40°C~+125°C
DP1013	12.8*10.5*10.2	3.3~22.0	3.0~5.1	-40°C~+125°C
DP1408F	14.0*8.0*16.0	6.8~22.0	8.0~8.5	-40°C~+125°C
DP1495F	14.0*9.6*16.0	4.7~33.0	7.0~14.0	-40°C~+125°C
DP1415	14.0*15.5*16.0	6.0~22.0	6.8~11.0	-40°C~+125°C
DP1615	16.0*15.0*16.0	10.0~22.0	3.8~6.4	-40°C~+125°C
DP1715	17.5*15.0*22.0	10.0~33.0	8.2	-40°C~+125°C
DP1715F	17.5*15.0*19.5	10.0~33.0	17.0	-40°C~+125°C
DP2320	23.0*15.0*23.0	10.0~33.0	14.0	-40°C~+125°C

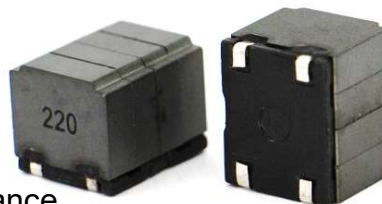
**We can make other specifications according to special requirements.

Shielded Power Inductor for Digital Amplifier

1013 Series

FEATURES:

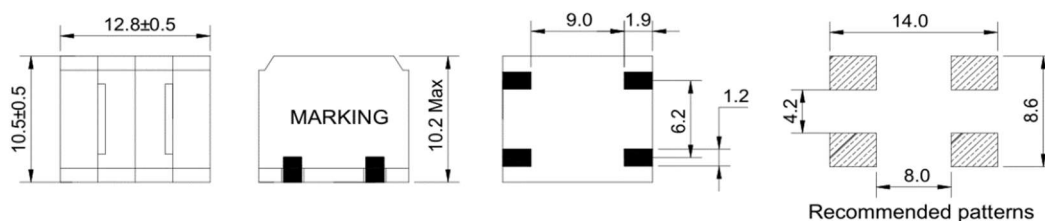
- Special magnetic shielding structure
- Strong anti-interference ability
- Small size, low noise and low radiation
- High current, low DC resistance
- Wide frequency range, small parasitic capacitance
- Excellent heat resistance, easy to weld
- Best design with high sound quality and low distortion
- Lead-free product, UL / CE / ROHS compliant



APPLICATIONS:

Audio equipment, LCD television set notebook PC, OA equipment digital camera, portable communication equipment, DC-DC converter, etc.

EXTERNAL DIMENSIONS: (unit: mm)



PART NO.	INDUCTANCE	DCR (MAX)	ISAT(MAX)	IRMS(MAX)
DP1013-3R3M	3.3±20%	11.0mΩ	12.0	5.1
DP1013-8R2M	8.2±20%	16.0mΩ	7.5	4.4
DP1013-100M	10.0±20%	18.0mΩ	7.1	4.2
DP1013-120M	12.0±20%	20.0mΩ	6.0	4.0
DP1013-150M	15.0±20%	23.0mΩ	5.3	3.8
DP1013-180M	18.0±20%	23.0mΩ	4.6	3.8
DP1013-220M	22.0±20%	38.0mΩ	4.3	3.0

HOW TO ORDER

DP 1013 – 4R7 M

- ① ② ③ ④

- ①D Shape and Pin Type
- ②Model (Dimensions)
- ③Inductance: 4R7=4.7μH
- ④Tolerance Code: M:±20%

ELECTRICAL SCHEMATIC

