ETD59/31/22DG

Ferrite core

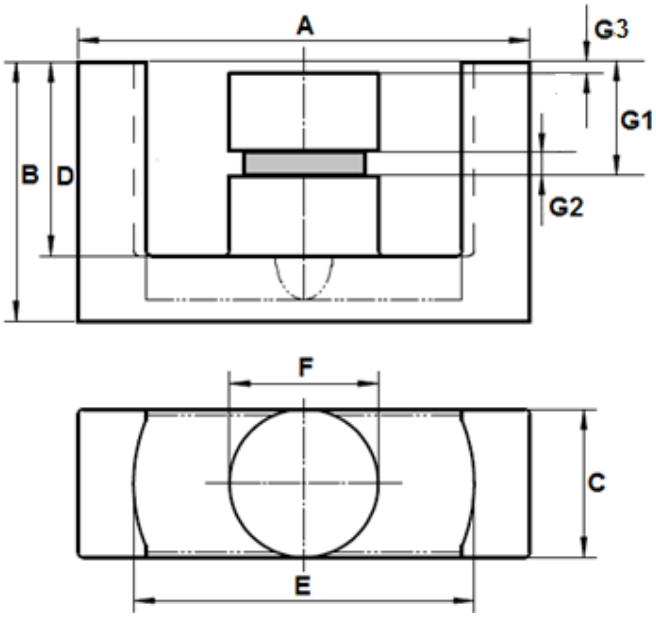
Series/Type:	**B66397**
Ordering code:	**B66397Q0100K195**
Date:	2019-09-17
Version:	1

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Preliminary data

Magnetic characteristic (per set)

l/A	=	0.38	mm^{-1}
l_e	=	139	mm
A_e	=	368	mm^2
A_{min}	=	368	mm^2
V_e	=	51200	mm^3



Dimensions (mm):

A:	59.8	± 1.4
B:	31.2	- 0.4
C:	22.1	- 0.9
D:	22.0	+ 0.9
E:	43.6	+2.2
F*:	22.1	- 0.9

* These dimensions will be passed through a sorting gauge as a measure of alignment between the glued parts.

Approx. weight: 260 g/set

Delivery mode: piece

Packing: Standard Styrofoam tray (size 200mm X 300mm)

Electrical parameters:

Material	AL [1)] nH	(G1) mm (ref.)	Space (G2) mm (ref.)	Airgap (G3) mm (ref.)	Ordering code
N95	100 ± 10%	12.86	2.18	1.08	B66367Q0100K195

1) Measurement Parameter: f = 10 kHz / B=0.25 mT / N=100 Turns/ Room Temperature.

A_L value is measured acc. to IEC62044-2. An appropriate wringing of cores with polished surface is used to improve reproducibility of the measurement. (It is recommended to rub the mating surfaces themselves six times in a circular or elliptic arc that matches the core profile before measuring A_L value).

Visual inspection acc. to IEC 60424.

Preliminary data

Cautions and warnings

Mechanical stress and mounting

Ferrite cores have to meet mechanical requirements during assembling and for a growing number of applications. Since ferrites are ceramic materials one has to be aware of the special behavior under mechanical load.
As valid for any ceramic material, ferrite cores are brittle and sensitive to any shock, fast temperature changing or tensile load. Especially high cooling rates under ultrasonic cleaning and high static or cyclic loads can cause cracks or failure of the ferrite cores.
For detailed information see data book, chapter *"General - Definitions, 8.1"*.

Effects of core combination on AL value

Stresses in the core affect not only the mechanical but also the magnetic properties. It is apparent that the initial permeability is dependent on the stress state of the core. The higher the stresses are in the core, the lower is the value for the initial permeability. Thus the embedding medium should have the greatest possible elasticity.
For detailed information see data book, chapter *"General - Definitions, 8.1"*.

Heating up

Ferrites can run hot during operation at higher flux densities and higher frequencies.

NiZn-materials

The magnetic properties of NiZn-materials can change irreversible in high magnetic fields.

Ferrite Accessories

Our ferrite accessories have been designed and evaluated only in combination with our ferrite cores. We explicitly point out that our ferrite accessories or ferrite cores may not be compatible with those of other manufacturers. Any such combination requires prior testing by the customer and will be at the customer‘s own risk.
We assume no warranty or reliability for the combination of our ferrite accessories with cores and other accessories from any other manufacturer.

Processing remarks

The start of the winding process should be soft. Else the flanges may be destroyed.

- Too strong winding forces may blast the flanges or squeeze the tube that the cores can not be mounted any more.
- Too long soldering time at high temperature (>300 °C) may effect coplanarity or pin arrangement.
- Not following the processing notes for soldering of the J-leg terminals may cause solderability problems at the transformer because of pollution with Sn oxyde of the tin bath or burned insulation of the wire. For detailed information see chapter *"Processing notes"*, section 2.2.
- The dimensions of the hole arrangement have fixed values and should be understood as a recommendation for drilling the printed circuit board. For dimensioning the pins, the group of holes can only be seen under certain conditions, as they fit into the given hole arrangement. To avoid problems when mounting the transformer, the manufacturing tolerances for positioning the customers' drilling process must be considered by increasing the hole diameter.

Preliminary data

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The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.** As a rule we are either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether a product with the properties described in the product specification is suitable for use in a particular customer application.
2. We also point out that **in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified.** In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
3. **The warnings, cautions and product-specific notes must be observed.**
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Important notes

8. The trade names EPCOS, CeraCharge, CeraDiode, CeraLink, CeraPad, CeraPlas, CSMP, CTVS, DeltaCap, DigiSiMic, ExoCore, FilterCap, FormFit, LeaXield, MiniBlue, MiniCell, MKD, MKK, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, PowerHap, PQSine, PQvar, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, ThermoFuse, WindCap are **trademarks registered or pending** in Europe and in other countries. Further information will be found on the Internet at www.tdk-electronics.tdk.com/trademarks.

Release 2018-10

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FG26X7R2J103KNT00 B32683A1223J000 B59886C0120A070 B65884E0012D001 B82477D4333M900 CGA4J2X8R1H104M125AA MLG1005S0N8BTD25 MLG1005S7N5JTD25 MMZ1608S102ATA00 B84111A0000A030 MLF1608D68NMTA00 C3225C0G2A683J230AA FHV-5AN MLG1005S2N4BTD25 SPM3012T-R47M-LR B32654A6335K000 B82496C3220G000 B82559A3292A025 B88069X5600S102 C3216X7R2A224K115AE CGA2B1C0G2A681J050BC MLG1005S68NJTD25 B32024A3105M000 B82422A1562J100 FA24C0G1H333JNU00 FHV-153AN B82559A7682A024 MMZ1005S601ETD25 CGA2B1X7R1C683M050BC CGA2B3X7R1H473K050BD