

Storage Choke, flat design



See below:

Approvals and Compliances

Description

- Storage choke
- THT-terminals
- Inductor horizontally positioned in housing
- Constant inductance at high alternating field modulation and large DC magnetization
- Reduced magnetic reversal
- SMD version on request

Applications

- Storage of energy in switched power supplies
- Switch-mode
- Chopper amplifiers
- DC drives and stepper motor controls

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [SPICE Library](#)

Technical Data

| | | | |
|---------------------------|---------------------------|---------------------------|-------------------------------|
| Rated voltage | up to 600VDC | Isolation Voltage | 2 kV eff., winding to ambient |
| Rated Current | 0.45 - 4.5 A @ Ta 70 °C | Climatic Category | 40/125/21 acc. to IEC 60068-1 |
| Rated inductance | 0.011 - 3.7 mH, Tol. ±15% | Allowable Operation Temp. | -40 °C to 125 °C |
| Power Operating Frequency | up to 1 MHz | | |
| Terminal Type | THT | | |
| Weight | 7 - 18 g | | |
| Material | UL 94V-0 | | |
| Sealing Compound | UL 94V-0 | | |

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|--------------|--------------------------------|----------------|---|
| | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

Compliances

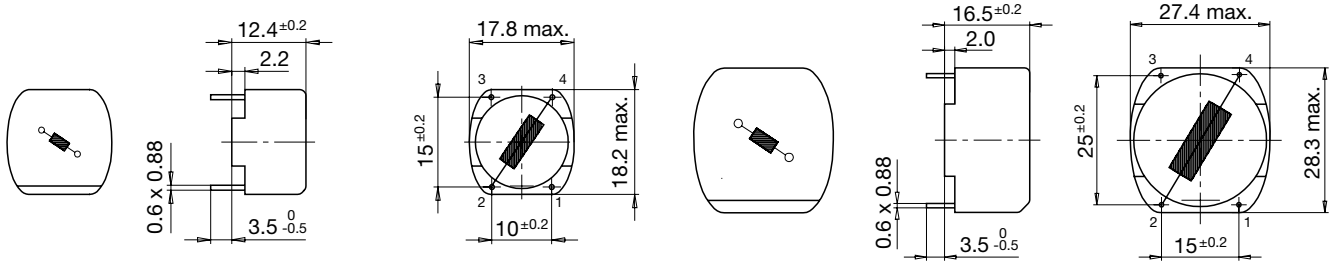
The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|----------------|--|-------------|---|
| | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008. |
| | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| | China RoHS | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS. |
| | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |

Dimensions [mm]

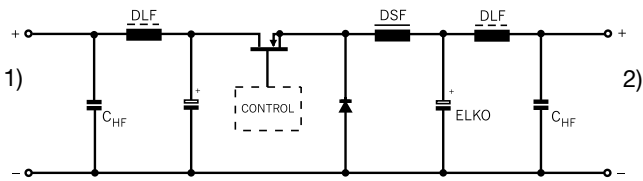
Case 04-1

Case 15-1



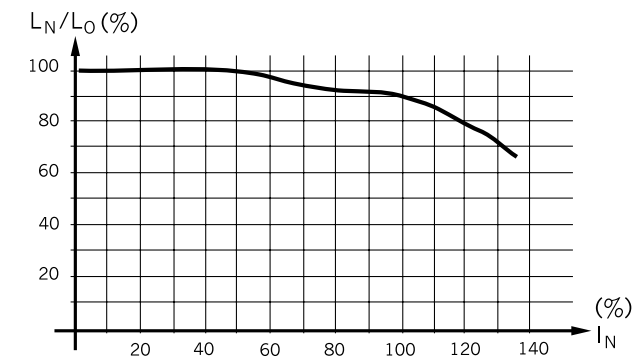
Diagrams

Application in DC-DC Converter



- 1) DC-Input unregulated
- 2) DC-Output regulated

Derating Curves



Inductance variation as function of the magnetizing current

All Variants

| I_n [A] | L_n [mH] | R_{cu} [mΩ] | f_{RES} [MHz] | Weight [g] | Housing | Packing unit [pcs.] | Order Number |
|-----------|------------|---------------|-----------------|------------|---------|---------------------|--------------|
| 0.6 | 0.5 | 360 | 2.5 | 7g | 04-1 | 45 | DSF-18-0002 |
| 1.2 | 0.125 | 90 | 6.5 | 7g | 04-1 | 45 | DSF-18-0003 |
| 2 | 0.045 | 32 | 12 | 7g | 04-1 | 45 | DSF-18-0005 |
| 4 | 0.011 | 8 | 32 | 7g | 04-1 | 45 | DSF-18-0006 |
| 0.45 | 3.7 | 1900 | 0.6 | 18g | 15-1 | 40 | DSF-28-0001 |
| 1 | 0.75 | 360 | 1.8 | 18g | 15-1 | 40 | DSF-28-0003 |
| 1.4 | 0.38 | 160 | - | 18g | 15-1 | 40 | DSF-28-0004 |
| 1.8 | 0.23 | 125 | 3.5 | 18g | 15-1 | 40 | DSF-28-0005 |

| I_n [A] | L_n [mH] | R_{cu} [mΩ] | f_{RES} [MHz] | Weight [g] | Housing | Packing unit [pcs.] | Order Number |
|-----------|------------|---------------|-----------------|------------|---------|---------------------|--------------|
| 3.15 | 0.075 | 45 | 7 | 18 g | 15-1 | 40 | DSF-28-0006 |
| 4.5 | 0.037 | 20 | 10 | 18 g | 15-1 | 40 | DSF-28-0007 |
| 4.5 | 0.018 | 10 | 18 | 18 g | 15-1 | 40 | DSF-28-0008 |

Most Popular.

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>