Storage Choke, fully potted resign



See below:

Approvals and Compliances

Description

- Storage choke
- THT-terminals
- Reduced magnetic reversal
- Constant inductance at high alternating field modulation and large DC magnetization
- Constant inductance at high alternating field modulation and large DC magnetization
- Fully potted resign

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, Distributor-Stock-Check, Detailed request for product, SPICE Library

Technical Data

| Rated voltage | up to 600 VDC |
|---------------------------|------------------------|
| Rated Current | 0.5 - 16A @ Ta 70 °C |
| Rated inductance | 0.01 - 1 mH, Tol. ±15% |
| Power Operating Frequency | up to 1 MHz |
| Terminal Type | THT |
| Weight | 7 - 243g |
| Material: Housing | UL 94V-0 |
| Sealing Compound | UL 94V-0 |

| Isolation Voltage | 2kV eff., winding to ambient |
|---------------------------|-------------------------------|
| Climatic Category | 40/125/21 acc. to IEC 60068-1 |
| Allowable Operation Temp. | -40°C to 125°C |

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 |
|--------------|--------------------------------|--------------|---|
| <u>IEC</u> | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

Compliances

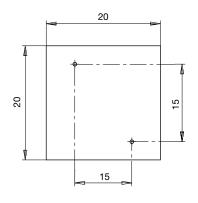
The product complies with following Guide Lines

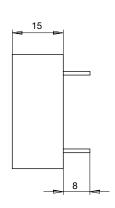
| Identification | Details | Initiator | Description |
|----------------|------------------------------|-------------|---|
| CE | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| ROHS | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/836 |
| © | 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 | 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. |

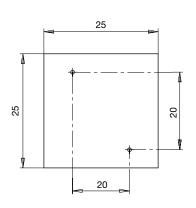
Dimension [mm]

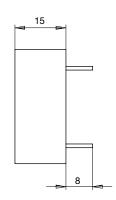
Case 20

Case 25



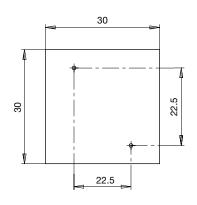


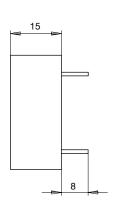


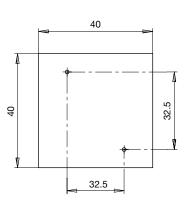


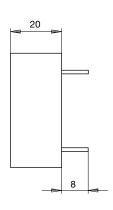
Case 30

Case 40



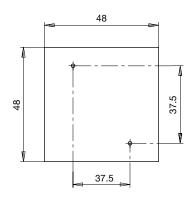


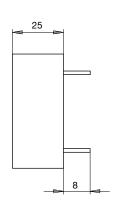


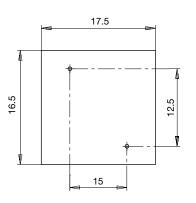


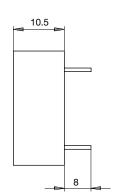
Case 48

Case 175



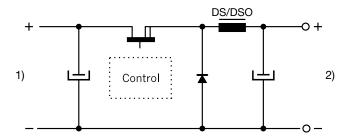






Diagrams

Switch-mode



- 1) Input 2) DC output regulated

All Variants

| Order Number | Packing unit [pcs.] | Housings | Weight [g] | Connection pins ø | f _{RES} [MHz] | R _{cu} [mΩ] | L _n [mH] | I _n [A] |
|--------------|---------------------|----------|------------|-------------------|---------------------------|-------------------------|---------------------|--------------------|
| DS1-175-0001 | 100 | 175 | 7 g | 0.5 | 2 | 700 | 0.8 | 0.5 |
| DS1-175-0002 | 100 | 175 | 7 g | 0.5 | 2.5 | 500 | 0.5 | 0.63 |
| DS1-175-0003 | 100 | 175 | 7 g | 0.5 | 5 | 180 | 0.2 | 1 |
| DS1-175-0004 | 100 | 175 | 7 g | 0.5 | 6.5 | 80 | 0.1 | 1.4 |
| DS1-175-0005 | 100 | 175 | 7 g | 0.5 | 11 | 26 | 0.035 | 3 |
| DS1-20-0001 | 75 | 20 | 14 g | 0.5 | 1.2 | 700 | 1 | 0.63 |
| DS1-20-0002 | 75 | 20 | 14 g | 0.5 | 4 | 175 | 0.2 | 1.4 |
| DS1-20-0003 | 75 | 20 | 14 g | 0.7 | 10 | 26 | 0.04 | 3.15 |
| DS1-20-0004 | 75 | 20 | 14 g | 0.7 | - | 8 | 0.01 | 6.3 |
| DS1-25-0001 | 50 | 25 | 23 g | 1 | 1 | 200 | 0.5 | 1.4 |
| DS1-25-0002 | 50 | 25 | 23 g | 1 | 3.5 | 100 | 0.2 | 2 |
| DS1-25-0003 | 50 | 25 | 23 g | 1 | 5.7 | 40 | 0.1 | 3.15 |
| DS1-25-0004 | 50 | 25 | 23 g | 1 | - | 10 | 0.02 | 7 |
| DS1-30-0001 | 30 | 30 | 34 g | 1 | - | 200 | 0.5 | 1.6 |
| DS1-30-0002 | 30 | 30 | 34 g | 1 | - | 140 | 0.3 | 2 |
| DS1-30-0003 | 30 | 30 | 34 g | 1 | 4.5 | 55 | 0.15 | 3.15 |
| DS1-30-0004 | 30 | 30 | 34 g | 1 | 6 | 36 | 0.1 | 4 |
| DS1-40-0001 | 35 | 40 | 84 g | 1.5 | - | 190 | 1 | 2 |
| DS1-40-0002 | 35 | 40 | 85 g | 1.5 | - | 90 | 0.5 | 3.15 |
| DS1-40-0003 | 35 | 40 | 84 g | 1.5 | 3 | 55 | 0.2 | 4 |
| DS1-40-0004 | 35 | 40 | 84 g | 1.5 | 4.5 | 26 | 0.1 | 6 |
| DS1-48-0001 | 20 | 48 | 243 g | 1.5 | 1 | 160 | 1 | 3.15 |
| DS1-48-0002 | 20 | 48 | 243 g | 1.5 | 1.5 | 80 | 0.5 | 4 |
| DS1-48-0003 | 20 | 48 | 243 g | 1.5 | - | 75 | 0.3 | 5 |
| DS1-48-0004 | 20 | 48 | 243 g | 1.5 | - | 20 | 0.1 | 9 |
| DS1-48-0005 | 20 | 48 | 243 g | 1.5 | - | 7 | 0.035 | 15 |
| DS1-48-0006 | 10 | 48 | 243 g | 1.5 | - | 12 | 0.16 | 16 |

Most Popular.

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