

## 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

#### **Technical Data**

Rated voltage	up to 600 VDC
Rated Current	0.45 - 4.5A @ Ta 70 °C
Rated inductance	0.011 - 3.7 mH, Tol. ±15%
Power Operating Frequency	up to 1 MHz
Terminal Type	THT
Weight	7 - 18g
Material	UL 94V-0
Sealing Compound	UL 94V-0

# See below: Approvals and Compliances

### 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

DSF

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

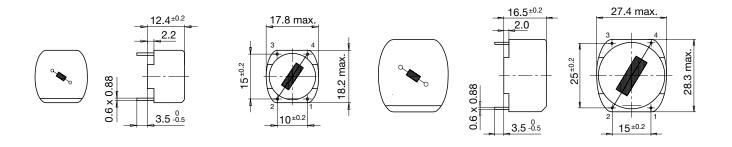
### Compliances

The product complies with following Guide Lines

Identification	Identification Details		Description				
C€	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.				
UK CA	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	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863				
<b>©</b>	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.				

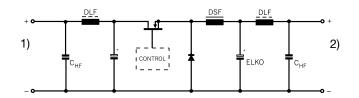
# Dimension [mm] Case 04-1

Case 15-1



# Diagrams

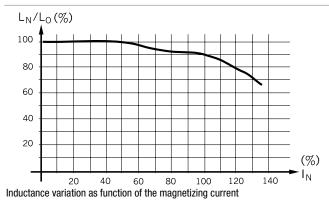
Application in DC-DC Converter



1) DC-Input unregulated

2) DC-Output regulated

# **Derating Curves**



# All Variants

I <sub>n</sub> [A]	L <sub>n</sub> [mH]	R <sub>cu</sub> [mΩ]	f <sub>RES</sub> [MHz]	Weight [g]	Housing	Packing unit [pcs.]	Order Number
0.6	0.5	360	2.5	7 g	04-1	45	DSF-18-0002
1.2	0.125	90	6.5	7 g	04-1	45	DSF-18-0003
2	0.045	32	12	7 g	04-1	45	DSF-18-0005
4	0.011	8	32	7 g	04-1	45	DSF-18-0006
0.45	3.7	1900	0.6	18 g	15-1	40	DSF-28-0001
1	0.75	360	1.8	18 g	15-1	40	DSF-28-0003
1.4	0.38	160	-	18 g	15-1	40	DSF-28-0004
1.8	0.23	125	3.5	18g	15-1	40	DSF-28-0005

I <sub>n</sub> [A]	L <sub>n</sub> (mH)	R <sub>cu</sub> [mΩ]	f <sub>RES</sub> [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	18g	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

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.