

Storage Chokes

DSF Series, flat housing

Nominal current:	0.45 - 6.3 A @ ϑ_a 70°C
Nominal inductance:	11 - 3700 μH / tol. \pm 15%
Max. working voltage:	600 VDC
Application range:	up to 1 MHz
Isolation voltage:	2 kV eff. / wdg.-ambient
Climatic category:	40/125/21 acc. to IEC 60068-1
Plastic case:	UL 94 V-0
Potting resin:	UL 94 V-0

This range of chokes enables horizontal mounting, thus reducing the height of mounted circuit. Finest quality core materials allow the highest electrical performance with minimum component volume. Good design with easy assembly allows good cost/performance ratio.

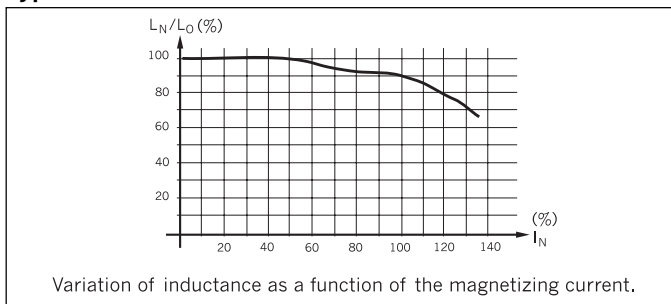
This type of choke is essential in the field of power electronics, e.g. switching power supplies, chopper amplifiers, DC drives and stepper motor controls.

Technical Data

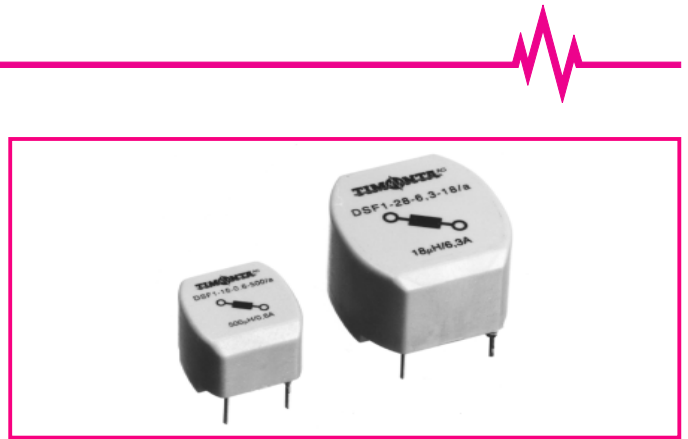
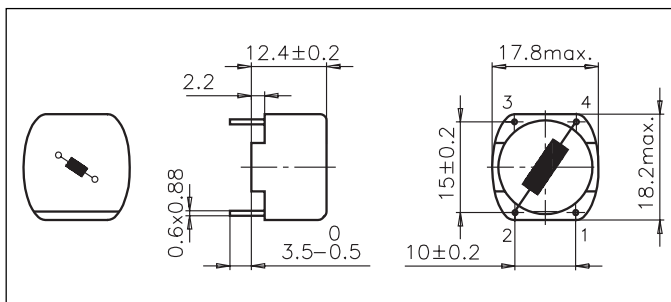
Type	I_N (1) [A]	L_N (2) [μ H]	R_{cu} (3) [m Ω]	$\sim f_{Res}$ [MHz]	Case
DSF1-18-0.6-500/a	0.6	500	360	2.5	04-1
DSF1-18-1.2-125/a	1.2	125	90	6.5	04-1
DSF1-18-2.0-45/a	2.0	45	32	12	04-1
DSF1-18-4.0-11/a	4.0	11	8	32	04-1
DSF1-28-0.45-3700/a	0.45	3700	1900	0.6	15-1
DSF1-28-0.63-1800/a	0.63	1800	900	1	15-1
DSF1-28-1.0-750/a	1.0	750	360	1.8	15-1
DSF1-28-1.8-230/a	1.8	230	125	3.5	15-1
DSF1-28-3.15-75/a	3.15	75	45	7	15-1
DSF1-28-4.5-37/a	4.5	37	20	10	15-1
DSF1-28-6.3-18/a	6.3	18	10	18	15-1

- (1) @ ϑ_a 70°C; current derating over 70°C: $I = I_N \times \sqrt{(125-\vartheta_a)/55}$
- (2) Nominal inductance measured according to EN 138100, see introduction of this catalog, paragraph 3.4
- (3) Resistance @ ϑ_a 25°C

Typical curve



Case 04-1



DSF Storage chokes are used as energy stores in switch mode power supplies. Principle features:

- reduced magnetic reversal
- constant inductance at high alternating field modulation and high DC magnetisation.

Environmental Ratings:

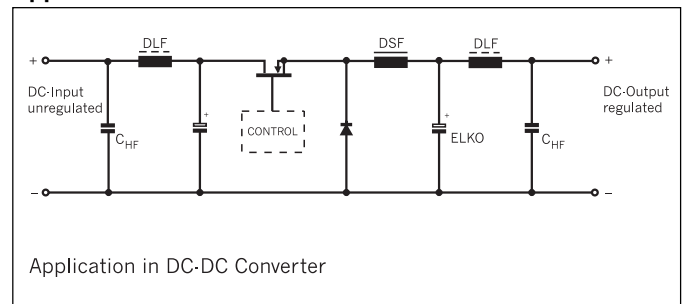
The **DSF chokes** can only be used with high frequency alternating current or with HF-modulated direct current up to 1 MHz, under consideration of their self heating (I_N and DI at f_0) and of the ambient temperature (ϑ_a).

Typical

Ambient temperature	ϑ_a = 70°C
Operating frequency	f_0 = 50 kHz
Nominal DC current	I_N = as per table
HF-Ripple	DI = 20% I_N

SMD-version upon request.

Application



Case 15-1

