

Magnetically Compensated Multiple Chokes



DKFP, DKFS and DFKH Series, vertical housing

| | |
|--|--|
| Nominal current: | 0.5 - 6.3 A @ ϑ_a 40°C |
| Nominal inductance: | 0.5 - 50mH / tol. -30% +50% |
| Rated voltage U_R ($U_{max.}$): | 440 VAC (DKFP: 250 VAC) |
| Frequency: | 50 - 400 Hz |
| Test voltage: | 1.8 kV/50 Hz/1min./wdg.-wdg. (DKFP: 1.5 kV) |
| Isolation voltage: | 2 kV eff. / wdg.-ambient |
| Climatic category: | 25/100/21 acc. to IEC 60068-1 |
| Plastic case: | UL 94 V-0 |
| Potting resin: | UL 94 V-0 |

All types of chokes correspond to the international specifications for radio interference chokes (EN 138100).

This range of chokes enables vertical mounting, thus reducing the area of PC board used. 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) [mH] | R_{cu} (3) [mΩ] | $\sim f_{Res}$ [MHz] | P_{loss} [W] | Case |
|--------------------|------------------|-------------------|----------------------|-------------------------|-------------------|-------|
| DKFP-6248-D504 | 0.5 | 2 x 4 | 2 x 500 | 1.2 | 0.250 | 48-2 |
| DKFP-6248-0102 | 0.9 | 2 x 2 | 2 x 240 | 1.6 | 0.390 | 48-2 |
| DKFP-6248-02D5 | 2.0 | 2 x 0.5 | 2 x 50 | 4.5 | 0.400 | 48-2 |
| DKFS-6248-D504 | 0.5 | 2 x 4 | 2 x 500 | 1.2 | 0.250 | 48-2S |
| DKFS-6248-0102 | 0.9 | 2 x 2 | 2 x 240 | 1.6 | 0.390 | 48-2S |
| DKFS-6248-02D5 | 2.0 | 2 x 0.5 | 2 x 50 | 4.5 | 0.400 | 48-2S |
| DFKH2-14-0.6-11/a | 0.6 | 2 x 11 | 2 x 600 | 0.5 | 0.5 | 50-2 |
| DFKH2-14-1.0-4/a | 1.0 | 2 x 4 | 2 x 250 | 1.2 | 0.5 | 51-2 |
| DFKH2-14-2.0-1/a | 2.0 | 2 x 1 | 2 x 65 | 2.5 | 0.5 | 52-2 |
| DFKH2-22-1.0-20/a | 1.0 | 2 x 20 | 2 x 500 | 0.25 | 1 | 09-2 |
| DFKH2-22-2.0-6.0/a | 2.0 | 2 x 6.0 | 2 x 150 | 0.6 | 1.3 | 09-2 |
| DFKH2-22-4.0-1.5/a | 4.0 | 2 x 1.5 | 2 x 36 | 1.5 | 1.2 | 09-2 |
| DFKH2-22-6.3-0.6/a | 6.3 | 2 x 0.6 | 2 x 15 | 2.5 | 1.4 | 09-2 |
| DFKH2-31-0.6-50/a | 0.6 | 2 x 50 | 2 x 1200 | 0.15 | 0.9 | 19-2 |
| DFKH2-31-1.0-33/a | 1.0 | 2 x 33 | 2 x 700 | 0.25 | 1.4 | 19-2 |
| DFKH2-31-1.4-27/a | 1.4 | 2 x 27 | 2 x 470 | 0.3 | 1.8 | 19-2 |
| DFKH2-31-2.0-6.8/a | 2.0 | 2 x 6.8 | 2 x 150 | 0.5 | 1.2 | 19-2 |
| DFKH2-31-4.0-3.3/a | 4.0 | 2 x 3.3 | 2 x 58 | 0.8 | 1.8 | 19-2 |
| DFKH2-31-6.0-2.0/a | 6.0 | 2 x 2 | 2 x 24 | 1.2 | 1.8 | 19-2 |

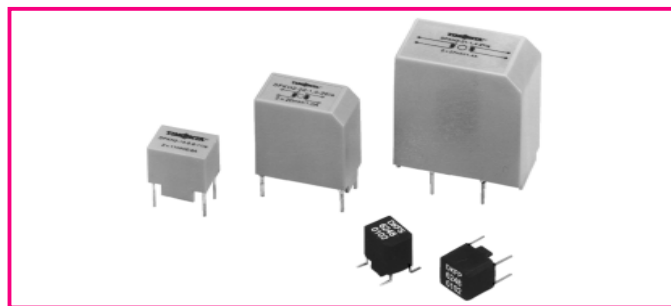
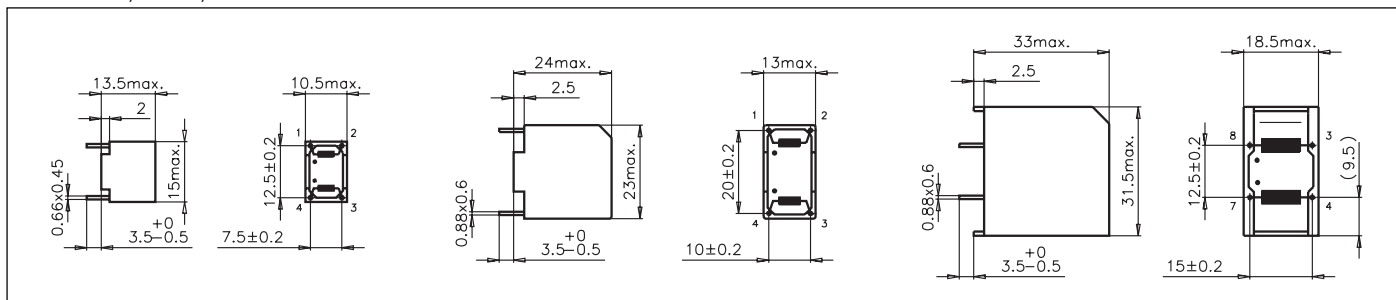
- (1) @ ϑ_a 40°C; current derating over 40°C: $I = I_N \times \sqrt{(100 - \vartheta_a)/60}$
- (2) Nominal inductance measured according to EN 138100, see introduction of this catalog, paragraph 3.4
- (3) Resistance @ ϑ_a 25°C

SMD-version upon request

Case 50-2, 51-2, 52-2

09-2

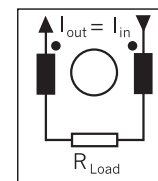
19-2



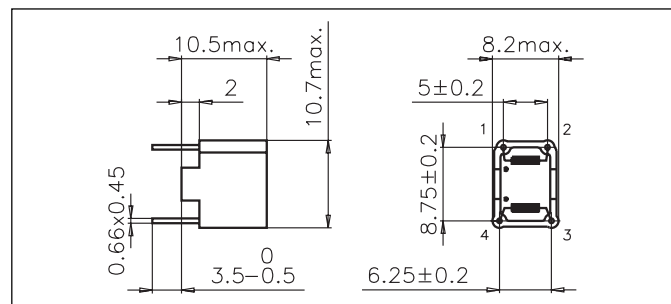
DFKH Magnetically compensated chokes, used for RFI suppression in equipment with relatively high asymmetric interference. Due to its current compensation characteristic, this type of choke presents an active broad-band series impedance.

Environmental ratings:

Magnetically compensated chokes can only be used when current is compensated. The current flowing into the choke on one (●) -side must flow 100% out of the choke from the other (●) side (see examples). Under different conditions the choke will be saturated by the lowest currents and the attenuation efficiency is lost.



Case 48-2



Case 48-2S (SMD Version)

