



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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FN 251

Filter for motor drives

- 4 to 24A current ratings
 - compact size
 - insulated safety input terminals
 - wire outputs
- Nennströme von 4 bis 24A
 - Kompakte Bauform
 - Berührungssichere Anschlußklemmen
 - Litzen an den Ausgängen
- courant de service entre 4 et 24A
 - taille réduite compacte
 - connexions d'entrée par bornes de sécurité isolées
 - connexions de sortie par fils



Technical specifications

Maximum operating voltage: 440VAC at 40°C; Operating frequency: DC to 60Hz at 40°C
 Hipot test voltage: P ⇒ E 2000VAC; P ⇒ P 1700VDC
 MTBF at 40°C, 400V per Mil-HB-217F: 160,000 hours
 Protection category: IP20
 Overload: 4 times rated current at switch on, then 1.5 times rated current for 1 minute, once per hour

Approvals



| Filter | Current ratings at 40°C (25°) A | Leakage current† (400V/50Hz) mA | Power loss W | Component values/phase | | | | | Connections input | Connections output | Weight kg |
|------------------|---------------------------------|---------------------------------|--------------|------------------------|-------|-------|-------|------|-------------------|--------------------|-----------|
| | | | | L mH | L1 mH | Cx µF | Cy nF | R kΩ | | | |
| FN 251 - 4 / 07 | 4 (4.6) | 0.5 | 5.5 | 7 | 1.5 | 1 | 15 | 470 | /29 | /07 | 0.75 |
| FN 251 - 8 / 07 | 8 (9.2) | 0.5 | 7 | 4.2 | 1.5 | 1 | 15 | 470 | /29 | /07 | 0.75 |
| FN 251 - 16 / 07 | 16 (18.4) | 0.5 | 14 | 2.6 | 0.7 | 1 | 15 | 470 | /29 | /07 | 1.8 |
| FN 251 - 24 / 07 | 24 (27.6) | 0.5 | 18 | 1 | 0.5 | 1 | 15 | 470 | /29 | /07 | 1.95 |

† Max. leakage under normal circumstances. Note: if two phases are interrupted, worst case leakage current could reach 7.7 times higher levels.

Mechanical data

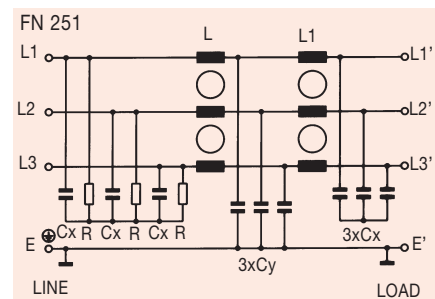
| Current | -4, -8 | -16, -24 | Tol.* ± mm |
|---------|---------------------|---------------------|------------|
| A | 145 | 180 | ± 0.5 |
| B | 75 | 115 | ± 0.5 |
| C | 40 | 60 | ± 0.5 |
| D | 123 | 85 | ± 0.5 |
| E | 135 | 115 | ± 0.2 |
| F | 55 ± 0.1 | 100 | ± 0.2 |
| G | | 0.7 | ± 0.05 |
| H | | 20 | ± 1 |
| M | 7 x 5.3 | 6.4 | ± 0.1 |
| P | | M6 | - |
| W | 1.31mm ² | 2.08mm ² | - |
| Y | | 6 | +1 |
| Z | | 300 | +10 |

All dimensions in mm; 1 inch = 25.4mm

* Measurements share this common tolerance unless otherwise stated

Electrical schematic

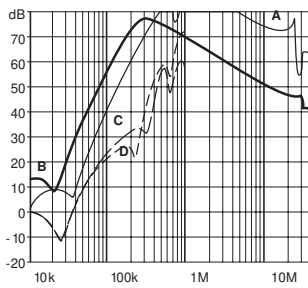
See table for component values



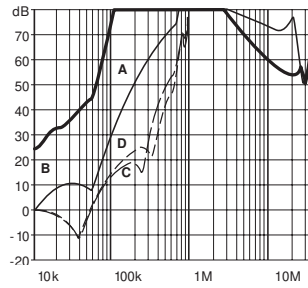
FN 251 insertion loss

Per CISPR 17; A = 50Ω/50Ω sym, B = 50Ω/50Ω asym, C = 0.1Ω/100Ω sym, D = 100Ω/0.1Ω sym

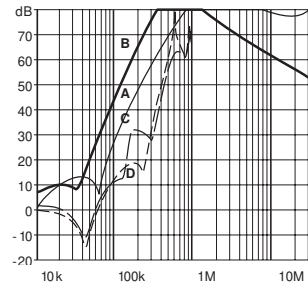
4 amp types



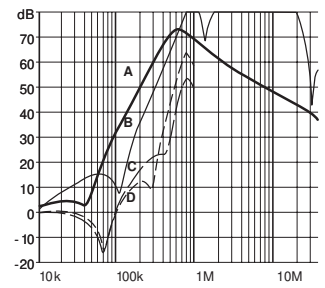
8 amp types



16 amp types



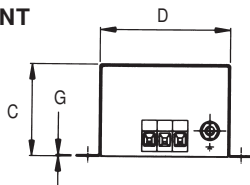
24 amp types



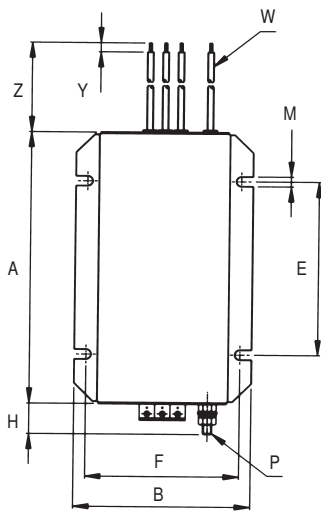
Mechanical drawings

See mechanical data table for dimensions

FRONT

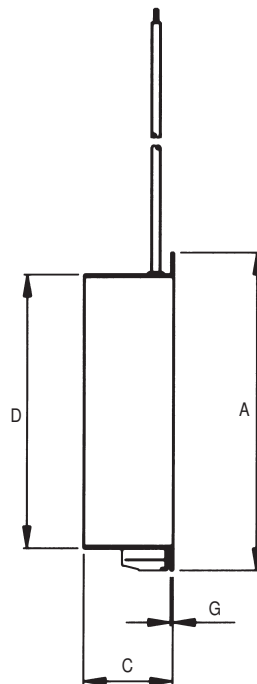


TOP

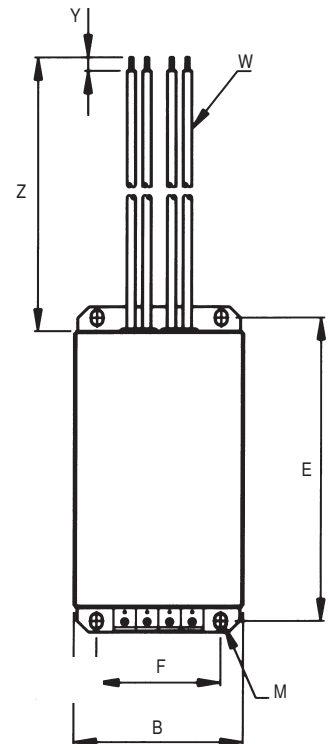


FN 251-16, -24
Input connection: /29

SIDE



TOP



FN 251-4, -8
Input connection: /29