## : ©hipsmall

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!


## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email \& Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, \#122 Zhenhua RD., Futian, Shenzhen, China

## Features:

- General Purpose Designed for Applications with Higher Differential Mode Noise
- Higher Line-to-Line Capacitance for Protection from Pulsed, Intermittent or Continuous RFI
- A Cost-Effective Replacement for Independent Coil Design in Many SMPS Applications
- Available with Integral IEC Connector


## F1700 Simplified Schematic



## F1799 Simplified Schematic



## Specifications:

Rated Voltage: 250VAC Maximum - $50 / 60 \mathrm{~Hz}$ Rated Current: 115VAC 250VAC

| $3 A$ | $2.5 A$ |
| ---: | ---: |
| $6 A$ | $4 A$ |
| $10 A$ | $6 A$ |
| $20 A$ | $10 A$ |
| $30 A$ | $15 A$ |

Current Overload: 6X for 8 seconds
Hi-Pot Test (1 min):

| Line to Ground | 1500VAC |
| :--- | :--- |
| Line to Line | 1768 VDC |

Insulation Resistance: $9 \times 10^{9} \Omega$ at 100 VDC
Ambient Temperature: $40^{\circ} \mathrm{C}$ Max. at rated current
Humidity Range: $0 \%$ to $95 \%$ R.H.
Termination:
A: QC - Quick Connect
C: IEC Receptacle
B: Wire
D: Screw

## Maximum Leakage Current:

| Each Line to Ground | F1700 | F1710 | F1720 | F1740 | F1799 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 115VAC, $60 \mathrm{~Hz}:$ | 0.40 mA | .15 mA | .002 mA | .060 mA | 0.25 mA |
| 250VAC, $50 \mathrm{~Hz}:$ | 0.75 mA | .25 mA | .005 mA | .120 mA | 0.45 mA |

Agency Approvals:


| Nominal Current Rating | Part Number | Termination Line/Load | MINIMUM INSERTION LOSS - dB (50 ohm Circuit) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | MODE | . 15 | . 50 | 1.0 | 5.0 | 10 | 30 |
| 3 A | F1700AA03 <br> F1700BB03 <br> F1700CA03 | QC/QC Wire/Wire IEC/QC | Common Differential | $\begin{aligned} & 20 \\ & 25 \end{aligned}$ | $\begin{aligned} & 35 \\ & 60 \end{aligned}$ | $\begin{aligned} & 43 \\ & 65 \end{aligned}$ | $\begin{aligned} & 52 \\ & 65 \end{aligned}$ | 55 50 | $\begin{aligned} & 50 \\ & 50 \end{aligned}$ |
|  | F1710AA03 | QC/QC | Common Differential | $\begin{aligned} & 20 \\ & 25 \end{aligned}$ | $\begin{aligned} & 34 \\ & 60 \end{aligned}$ | $\begin{aligned} & 40 \\ & 65 \end{aligned}$ | $\begin{aligned} & 45 \\ & 65 \end{aligned}$ | $\begin{aligned} & 45 \\ & 50 \end{aligned}$ | $\begin{aligned} & 40 \\ & 50 \end{aligned}$ |
|  | F1720AA03 | QC/QC | Common Differential | $\begin{aligned} & 20 \\ & 35 \end{aligned}$ | $\begin{aligned} & 32 \\ & 60 \end{aligned}$ | $\begin{aligned} & 35 \\ & 65 \end{aligned}$ | $\begin{aligned} & 35 \\ & 60 \end{aligned}$ | $\begin{aligned} & 35 \\ & 55 \end{aligned}$ | $\begin{aligned} & 40 \\ & 40 \end{aligned}$ |
|  | F1740AA03 | QC/QC | Common Differential | $\begin{aligned} & 20 \\ & 35 \end{aligned}$ | $\begin{aligned} & 30 \\ & 60 \end{aligned}$ | $\begin{aligned} & 35 \\ & 65 \end{aligned}$ | $\begin{aligned} & 35 \\ & 60 \end{aligned}$ | $\begin{aligned} & 35 \\ & 55 \end{aligned}$ | $\begin{aligned} & 40 \\ & 40 \end{aligned}$ |
| 6 A | F1700AA06 <br> F1700BB06 <br> F1700CA06 | QC/QC Wire/Wire IEC/QC | Common Differential | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ | $\begin{aligned} & 22 \\ & 50 \end{aligned}$ | $\begin{aligned} & 30 \\ & 65 \end{aligned}$ | $\begin{aligned} & 46 \\ & 60 \end{aligned}$ | $\begin{aligned} & 50 \\ & 60 \end{aligned}$ | $\begin{aligned} & 45 \\ & 60 \end{aligned}$ |
| 10A | F1700AA10 <br> F1700BB10 <br> F1700CA10 | QC/QC <br> Wire/Wire IEC/QC | Common Differential | $\begin{aligned} & 10 \\ & 20 \end{aligned}$ | $\begin{aligned} & 22 \\ & 45 \end{aligned}$ | $\begin{aligned} & 30 \\ & 60 \end{aligned}$ | $\begin{aligned} & 46 \\ & 65 \end{aligned}$ | 50 60 | $\begin{aligned} & 45 \\ & 55 \end{aligned}$ |
| 20A | F1700AA20 | QC/QC Screw/Screw | Common Differential | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ | $\begin{aligned} & 22 \\ & 45 \end{aligned}$ | $\begin{aligned} & 30 \\ & 60 \end{aligned}$ | $\begin{aligned} & 42 \\ & 65 \end{aligned}$ | $\begin{aligned} & 47 \\ & 60 \end{aligned}$ | $\begin{aligned} & 40 \\ & 55 \end{aligned}$ |
|  | $\begin{aligned} & \hline \text { F1700DD20 } \\ & \text { F1720DD20 } \end{aligned}$ | Screw/Screw | Common Differential | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ | $\begin{aligned} & 22 \\ & 45 \end{aligned}$ | $\begin{aligned} & 30 \\ & 60 \end{aligned}$ | $\begin{aligned} & 42 \\ & 65 \end{aligned}$ | 47 60 | $\begin{aligned} & \hline 52 \\ & 55 \end{aligned}$ |
| 30A | F1700DD30 | Screw/Screw | Common Differential | $\begin{gathered} 7 \\ 15 \end{gathered}$ | $\begin{aligned} & 15 \\ & 45 \end{aligned}$ | $\begin{aligned} & 20 \\ & 60 \\ & \hline \end{aligned}$ | $\begin{aligned} & 34 \\ & 65 \end{aligned}$ | 42 <br> 60 | $\begin{aligned} & 40 \\ & 55 \end{aligned}$ |
|  | F1799DD30 | Screw/Screw | Common Differential | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ | $\begin{aligned} & 45 \\ & 65 \end{aligned}$ | $\begin{aligned} & 55 \\ & 65 \end{aligned}$ | $\begin{aligned} & 60 \\ & 65 \end{aligned}$ | 60 60 | $\begin{aligned} & 50 \\ & 55 \end{aligned}$ |

NOTE: Other combinations of terminals may be specified on special order.

F1700AA, 1710, 1720, 1740 (3, 6 and 10Amp) Dimensions


F1700BB (3, 6 and 10Amp) Dimensions

| Amps | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 A | 2.750 | 1.750 | 1.125 | 2.375 | 2.000 |
|  | $(69,8)$ | $(44,4)$ | $(28,5)$ | $(60,3)$ | $(50,8)$ |
| 6 A | 3.312 | 2.000 | 1.125 | 2.940 | 2.500 |
|  | $(84,1)$ | $(50,8)$ | $(28,5)$ | $(74,7)$ | $(63,5)$ |
| 10 A | 3.312 | 2.000 | 1.500 | 2.940 | 2.500 |
|  | $(84,1)$ | $(50,8)$ | $(38,1)$ | $(74,7)$ | $(63,5)$ |



F1700DD20 (20Amp) Dimensions


| Amps | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 A | 2.750 | 1.750 | 1.125 | 2.375 | 2.000 | .550 |
|  | $(69,8)$ | $(44,4)$ | $(28,5)$ | $(60,3)$ | $(50,8)$ | $(14,0)$ |
| 6 A | 3.312 | 2.000 | 1.125 | 2.940 | 2.500 | .550 |
|  | $(84,1)$ | $(50,8)$ | $(28,5)$ | $(74,7)$ | $(63,5)$ | $(14,0)$ |
| 10 A | 3.312 | 2.000 | 1.500 | 2.940 | 2.500 | .550 |
|  | $(84,1)$ | $(50,8)$ | $(38,2)$ | $(74,7)$ | $(63,5)$ | $(14,0)$ |
| 20A | See 1700DD20 for Case Dimensions |  |  |  |  |  |

F1700CA
( 3,6 and 10Amp) Dimensions

Refer to Page 40 for Standard Mounting Cutouts


| Amps | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 A | 2.000 | 2.000 | 1.500 | .550 | .565 |
| $(50,8)$ | $(50,8)$ | $(38,1)$ | $(14,0)$ | $(14,3)$ |  |
| 6 A | 2.500 | 2.000 | 1.500 | .550 | .565 |
| $(63,5)$ | $(50,8)$ | $(38,1)$ | $(14,0)$ | $(14,3)$ |  |
| 10 A | 2.500 | 2.000 | 1.500 | .550 <br> $(63,5)$ | .565 <br> $(50,8)$ |



F1799DD (30Amp) Dimensions


F1200CA, F1300CA, F1400CA,
F1500CA, F1600CA, F1700CA


## How to Order

The Curtis part numbering system is made up of four elements. Each element denotes a specific requirement (mechanical or electrical) which, when properly sequenced, fully identifies the required catalog filter. As shown, the first five alpha/numeric characters denote the series type; the sixth character (alpha) denotes the type of line termination; the seventh character (alpha) denotes the type of load termination; the last two characters (numeric) denote the current rating.
Compose your part number as follows: Select the series required, add two alpha character for the line and load termination, followed by two numeric characters for the required current rating. For example, F1100AB06 completely identifies an F 1100 series filter with quick connects on line side and wire leads on load side, with a 6 -amp rating.

| F1100 | X X | X |
| :---: | :---: | :---: |
| SERIES - |  | CURRENT |
| PE = Power Entry |  | RATING |
| PM = Medical |  | $01=1 \mathrm{Amp}$ |
| Power Entry |  | $03=3 \mathrm{Amps}$ |
|  |  | $06=6 \mathrm{Amps}$ |
| LINE TERMINATION |  | $10=10 \mathrm{Amps}$ |
| A = Quick Connects |  | $15=15 \mathrm{Amps}$ |
| $B=$ Wire Leads | LOAD | $20=20 \mathrm{Amps}$ |
| $\mathrm{C}=\mathrm{IEC}$ Connector | TERMINATION | $30=30 \mathrm{Amps}$ |
| D= Screw Terminals | A = Quick Connects |  |
| (20 \& 30 amp only) | $B=$ Wire Leads |  |
| $\mathrm{F}=$ Fused IEC | D= Screw Terminals |  |
| $\mathrm{P}=$ Printed Circuit Pins | (20 \& 30 amp only) |  |
| W= Dual Fused IEC | $\mathrm{P}=$ Printed Circuit Pins |  |
| $J=$ Switched IEC | S $=$ Solder Tab |  |

F1500FA, F1600FA,


## F1300CP, F1600CP



F5500/5600/5700 SERIES


