imall

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

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FC SERIES - 5A, 10A, 20A, FILTER

DESCRIPTION

FC100 industry standard input filter modules provide up to 30 dB of common mode and differential mode filtering at 500 kHz. The FC100's are available in 5A, 10A, and • Optimized For 20A versions and are optimized for operation with Power-One's high density, board-mounted products. The filters can be operated with up to 100 VDC input and have 1000 VDC isolation.

FEATURES

- Meets Class B Conducted Limits
- Power-One's High
- Density, Board-Mounted >30 dB Insertion Loss at Products
- PCB Mountable
- Common Mode and Differential Mode Filtering
- Industry Standard Pinout
- -40°C to 100°C Case Operation
- 500 kHz
- 100 VDC Operation

TECHNICAL SPECIFICATIONS

| Input | |
|------------------------|----------|
| Maximum Input Voltage | 100 VDC |
| Line-to-Case Operation | 1000 VDC |
| Input Frequency | 100 Hz |

| | Output | |
|-------------------------|--------|-----------------------|
| Maximum Average Current | | |
| 400 LFM Airflow | | I _{out} Max. |
| Natural Convection | | 70% I _{out} |

| General | | | | |
|--------------------------------------------|-----------------|--|--|--|
| Isolation Input - Case | 1000 VDC | | | |
| Case Temperature | 1000 VDC | | | |
| Operating Range @ I _{out} Max. | -40 to +60°C | | | |
| Operating Range @ 70% I Max. | -40 to +80°C | | | |
| Storage Range | -40 to +125°C | | | |
| Humidity Max., Non-Condensing | 95% | | | |
| Vibration, 3 Axes, 5 Min Each | 5 g, 10 - 55 Hz | | | |
| MTBF [†] (Bellcore TR-NWT-000332) | Consult Factory | | | |
| Safety | Consult Factory | | | |



Notes

[†] MTBF predictions may vary slightly from model to model.

Specifications typically at 25°C, normal line, and full load, unless otherwise stated.

Soldering Conditions: I/O pins, 260°C, ten seconds; fully compatible with commercial wave-soldering equipment.

Safety: Agency approvals may vary from model to model. Please consult factory for specific model information.



FC SERIES - 5A, 10A, 20A, FILTER

MODELS - (See the last page of Section C for options.)

| Operating Current (Amps) | Insertion Loss* Differential Mode (dB) | Insertion Loss* Common Mode (dB) | Typical Resistance** (mOhms) | Model |
|-----------------------------|----------------------------------------------|----------------------------------------|------------------------------------|-----------|
| 5 | 28 | 30 | 27 | FC100V5A |
| 10 | 31 | 28 | 17 | FC100V10A |
| 20 | 26 | 32 | 6.6 | FC100V20A |

=

DIA 0.040

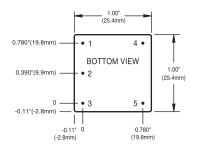
(1.0mm)

* Typical loss at 500 kHz (50 Ohms)

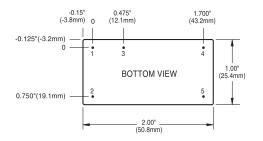
** Resistance Per Leg

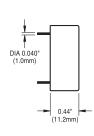
MECHANICAL DRAWING





FC100V10A





0.40" (10.2mm)

_ 2.05" _ (52.1mm) DIA 0.040" (1.0mm) 0.18"(4.6mm) 0.46" (11.7mm)

| Pin Function | Pin | Function | Pin | Function | Tole | Tolerances | |
|------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--|
| 5A Module 1 +V _{in} 2 Ground 3 -V _{in} 4 +V _{out} 5 -V _{out} | 10A Modul 1 2 3 4 5 | le +V _{in} -V _{in} Ground +V _{out} -V _{out} | 20A Modul 1 2 3 4 5 6 7 8 9 | e -V _{in} +V _{in} +V _{in} Ground -V _{out} +V _{out} +V _{out} | Inches: .XX ± 0.020 .XXX ± 0.010 Pin: ± 0.002 (Dimensions as listed specified.) | (Millimeters) .X ± 0.5 .XX ± 0.25 ± 0.05 unless otherwise | |

FC100V20A

0.700" (17.8mm)

5

BOTTOM VIEW

1.700" (43.2mm)

6 •

7

8

9

0.100"(2.5mm)

0.300"(7.6mm)

0.500"(12.7mm)

0.020" (0.51mm)

1.65" - 0.700"(17.8mm) (41.9mm)

Ť.

-0.15" (-3.8mm) 0

1

• 2

• 3

• 4

0

-0.15"(-3.8mm)

0.200"(5.1mm)

0.400"(10.2mm)

0.600"(15.2mm) _