

Click to
ORDER
samples

AMFW40-JZ



1x1"

The AMFW40-JZ series of filters are designed for meeting the EMC requirements of noise-sensitive applications. This EMC filter has an input voltage range of 0-80VDC and the operating temperature range from -40 to 85C which enables it to be used in many industrial applications and operating environments.

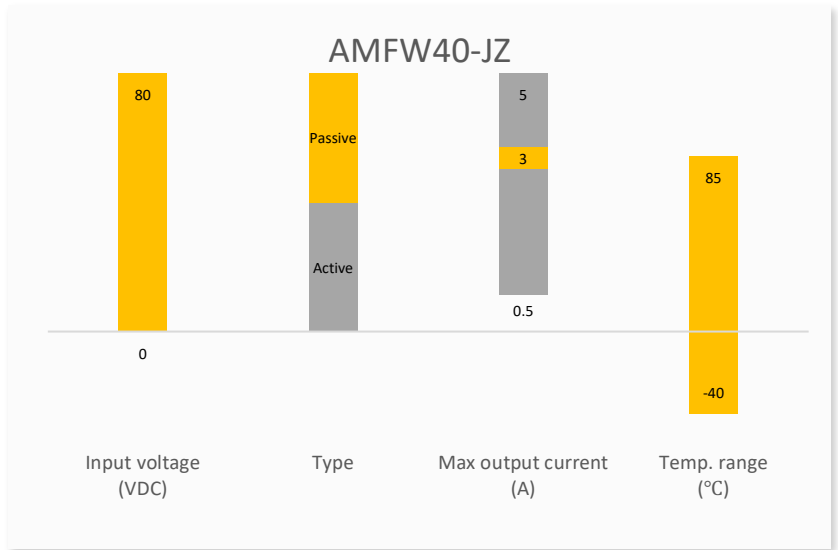
The typical impedance value of 20 dBΩ for 150KHz to 100MHz frequency range. It is PCB mountable and available in optional chassis and DIN-rail mounting plate options.

Features

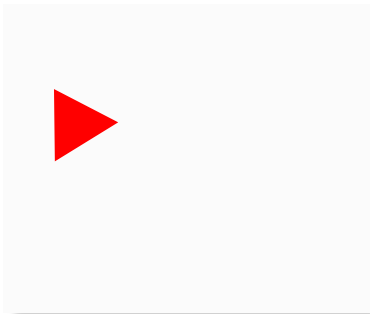


- Wide Input: 0 - 80VDC
- Operating Temp: -40 °C to +85 °C
- High Isolation Voltage: 1500VDC
- Frequency Impedance: 20dB Ω @150k~100MHz
- EMI meet EN55032 Class B

Summary



Training



Product Training Video
(click to open)



Application Notes

Applications



Power Grid



Industrial



Telecom



Instrumentation

Models & Specifications

| Models | | |
|------------|---------------------|-----------------|
| Model | Input Voltage (VDC) | Max Current (A) |
| AMFW40-3JZ | 0 ~ 80 | 3 |

Note: Use suffix "ST" for chassis and suffix "STD" for DIN-Rail mounting (ex. AMFW40-3JZ-ST is chassis mounting and AMFW40-3JZ-STD is DIN-Rail mounting version).

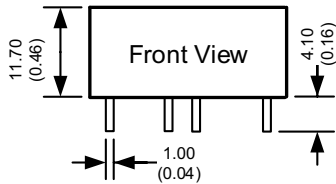
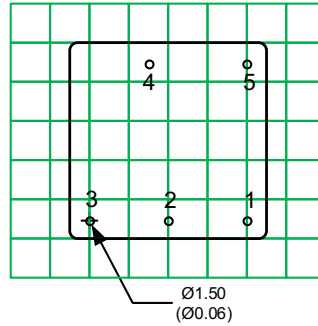
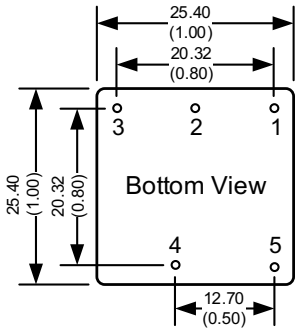
| Frequency Impedance Specifications | | | | |
|------------------------------------|-------------------|---------|---------|-------|
| Parameters | Tested Conditions | Typical | Maximum | Units |
| Impedance | 150KHz ~ 100MHz | 20 | | dBΩ |

| General Specifications | | | | |
|---|-----------------------------------|---|---------|-------|
| Parameters | Conditions | Typical | Maximum | Units |
| Operating temperature | | -40 to +85 | | °C |
| Storage temperature | | -55 to +125 | | °C |
| Storage Humidity | | | 95 | % |
| Case temperature rise | Full load | | 40 | °C |
| Isolation Voltage (+Vin / GND ; -Vin / GND) | | | 1500 | VDC |
| D.C.R | Input to Output | 30 | | mΩ |
| Case material | Aluminum Alloy | | | |
| Weight | PCB mountable models | 12.35 | | g |
| | With optional -ST mounting plate | 35 | | |
| | With optional -STD mounting plate | 55 | | |
| Dimensions (L x W x H) | PCB mountable models | 1.00 x 1.00 x 0.46 inches (25.40 x 25.40 x 11.70mm) | | |
| | With optional -ST mounting plate | 2.99 x 1.24 x 0.84 inches (76.00 x 31.50 x 21.20mm) | | |
| | With optional -STD mounting plate | 2.99 x 1.24 x 1.02 inches (76.00 x 31.50 x 25.80mm) | | |

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

| Safety Specifications | |
|-----------------------|--|
| Parameters | |
| Standards | AMFW40-3JZ can ensure Aimtec DC/DC converter module with 3A input current EMI meet EN 55032 Class B. |

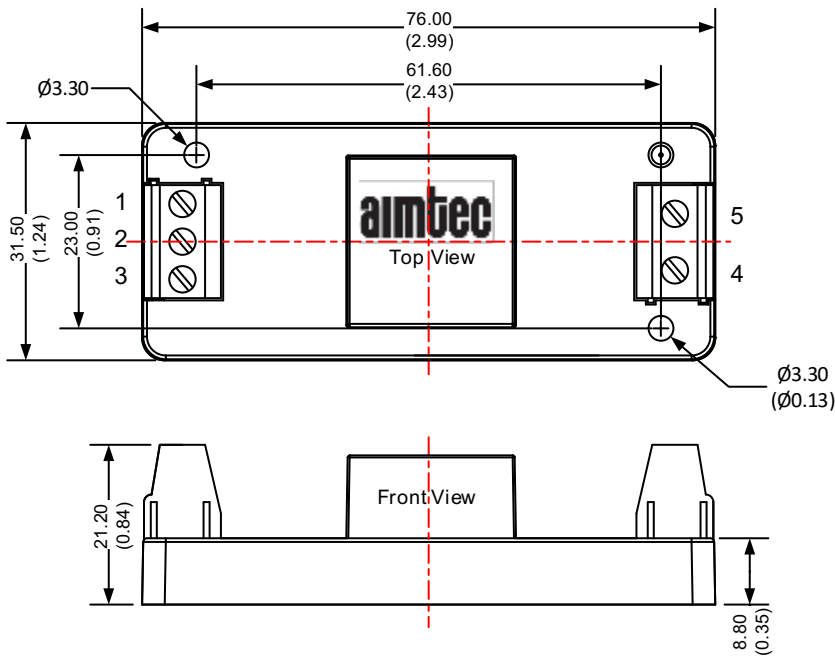
Dimensions



Dimensions mm (inch).
Pin diameter tolerance ± 0.1 (± 0.004)
Pin height tolerance ± 0.5 (± 0.02)
Case tolerance ± 0.25 (± 0.01)

| Pin Output Specifications | |
|---------------------------|-----------|
| Pin | Single |
| 1 | +V Input |
| 2 | -V Input |
| 3 | GND |
| 4 | -V Output |
| 5 | +V Output |

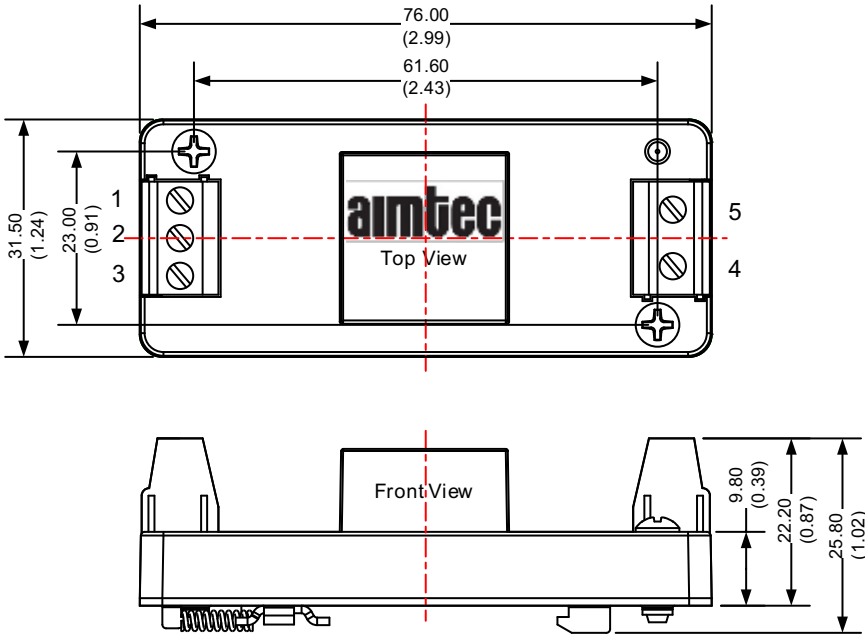
Dimensions with ST Optional



Dimensions mm (inch)
Wire range: 24-12 AWG
General tolerances ± 0.50 (± 0.02)

| Pin Output Specifications | |
|---------------------------|-----------|
| Pin | Single |
| 1 | +V Input |
| 2 | -V Input |
| 3 | GND |
| 4 | -V Output |
| 5 | +V Output |

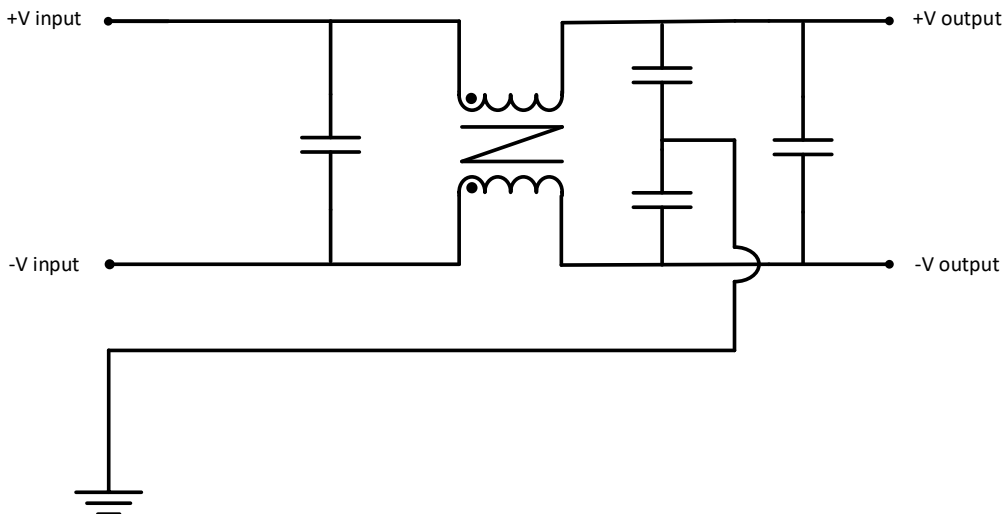
Dimensions with STD Optional



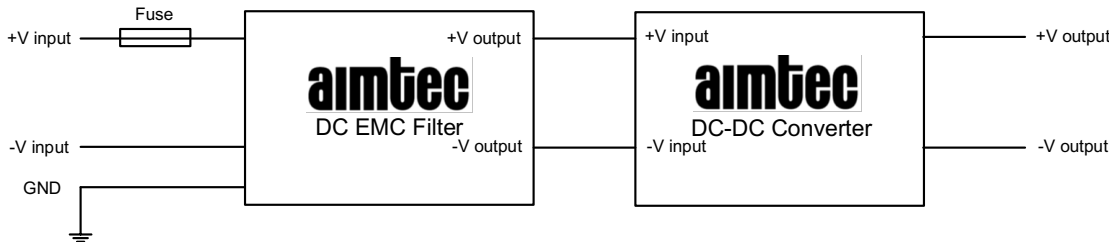
| Pin Output Specifications | |
|---------------------------|-----------|
| Pin | Single |
| 1 | +V Input |
| 2 | -V Input |
| 3 | GND |
| 4 | -V Output |
| 5 | +V Output |

Dimensions mm (inch)
Wire range: 24-12 AWG
General tolerances: ± 0.50 (± 0.02)

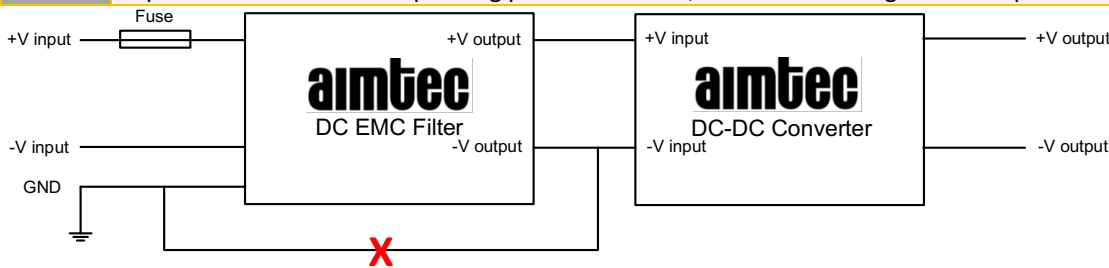
Internal Schematic



Application Circuit



| Model | Recommended external circuit parameters |
|-------|---|
| Fuse | The fuse value varies with different power modules and must be selected in accordance with the specified input current of the corresponding power converter, but not exceeding the filter specifications. |



Note: Connections marked with **X** interfere with this filter modules performance and should therefore not be used

NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com.