

# DC Power Line EMI Filters

## Clean Power Free of High-Frequency Noise

OnFILTER DC EMI filters greatly reduce noise from switched power supplies, stepper motors and other sources common in today's equipment and provide noise-free DC power for your sensitive equipment. OnFILTER' proprietary design accomplishes maximum noise suppression of signals polluting your DC power lines, removing harmful interference typical for industrial equipment.

Clean power is essential for uninterrupted and problem-free operation of electrical and electronic equipment. As electromagnetic interference (EMI) on your power lines spreads through equipment, it causes downtime, including false alarms, software errors and sometimes component damage.

Unique design of OnFILTER' DC filters focuses on the properties of real-life signals on power lines and produces maximum attenuation of the "worst offenders" in actual installations, not just in the lab conditions.



### Applications

- Electronic manufacturing
- Semiconductor fabrication
- Disk drive assembly
- Industrial robotics
- Medical
- Military
- Wherever EMI is an issue

### Features

- Easy installation
- Optimized for real-life noise
- Effective noise suppression
- Differential and common-mode noise suppression
- Up to 50V DC 9A

### Improved Performance

Clean power reduces errors and malfunctioning of equipment. Easy-to-implement OnFILTER DC filters provide noise-free power and reduce EMI-caused equipment downtime.

### Suppression of Noise of All Types

OnFILTER' DC filters provide suppression for both types of noise - differential (between positive and negative supply lines) and common-mode (between both power lines and ground).

OnFILTER DC filters are non-polar eliminating errors in connection. Both positive and negative supply lines are equally filtered for the best noise suppression.

### Transient Noise Suppression

Most of the noise on power lines is not continuous waveforms of high frequency but rather "spikes" generated by solenoids, relays, stepper and variable-frequency motors and alike. The peak value of these spikes can be very strong reaching several volts which may cause circuit latch-up. OnFILTER' DC filters are especially effective for this type of signals.

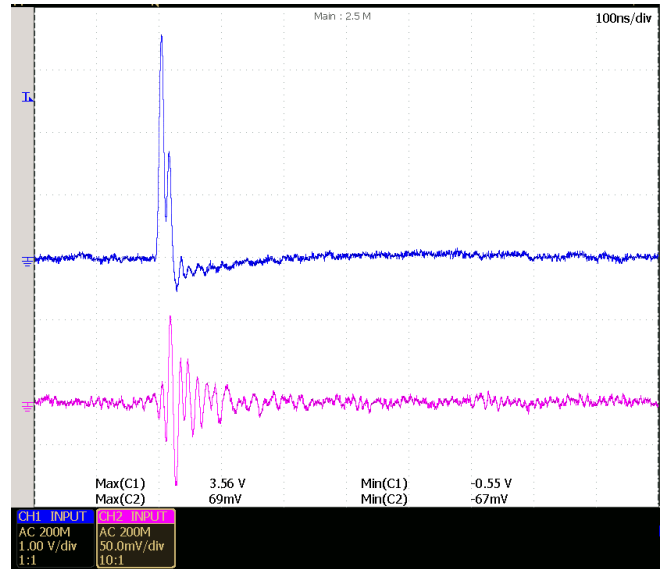
## DC Power Line Filters



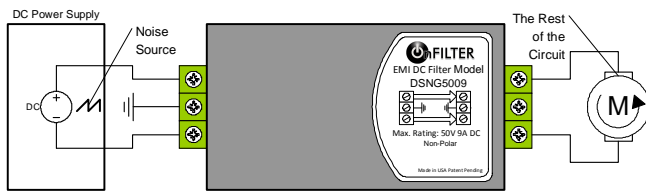
# Specification

OnFILTER DC filters utilize proprietary technology to provide maximum noise suppression in actual installations.

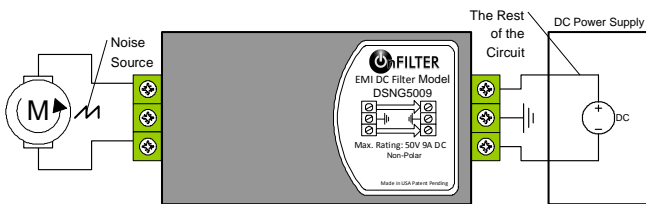
Parameter	Value
Rated Max. Voltage, DC	50V
Rated Max. Current, DC	9A
Transient Signal Attenuation (Typical)	30dB
Power Indication	LED
Termination	Terminal block
Dimensions (WxDxH) with mounting flanges	2.6"x5.3"x1.725" 66*135*43.8mm



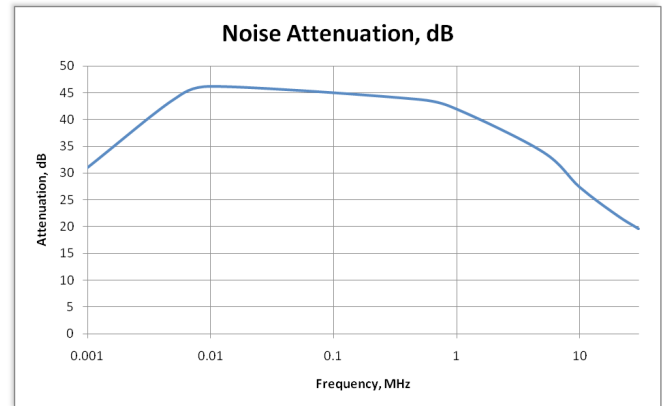
Typical transient signal performance of the DC filter.  
Note the scale. Peak attenuation in this case is 34dB



Typical connection to protect sensitive circuit from noisy supply voltage



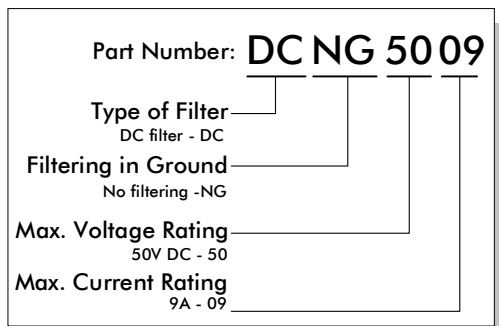
Typical connection to isolate noisy device on DC power line voltage



Typical frequency-domain attenuation performance of the DC filter  
0.1/50 Ohms connection

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# Ordering Information



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