**Ground Line EMI Filter**

**GLE04-01**

**Specification**

- **Application**: Non current-carrying ground circuits
- **Nominal DC Resistance**: <0.2 Ohms
- **Noise Attenuation (typ.)**: > 40dB (100 times)
- **Connections Screw**: #6 (supplied with ring terminal)
- **Polarity**: Non-polar
- **Dimensions**: LxWxD 2.02” x 1.378” x 0.787”
- **Material**: ABS plastic
- **Temperature Range**: 5°C...40°C
- **Climatic Category**: +5/040/00
- **Extended temperature range and other configuration models available - contact factory**

**Impulse response of GLE04-01**

- **Noise Attenuation into 10 Ohms, dB (Typical)**

![Noise Attenuation into 10 Ohms, dB (Typical)](graph)

**Impulse response of GLE04-01**

- **Original Pulse**
- **After GLE04-01**

**User’s Guide**
Thank you for buying OnFILTER’s Ground Line EMI filter!

Our Ground Line EMI filters are designed to effectively suppress high-frequency electrical noise on ground. This noise (often called conducted ElectroMagnetic Interference - EMI) causes numerous equipment malfunctions, including lock-up, erratic response, software errors, and other often “unexplained” and “random” equipment behavior, as well as electrical overstress (EOS) of sensitive electronics.

EMI on ground is common in industrial environment because grounding connects all equipment together and serves as a conduit for propagation of electrical noise throughout the entire facility. The only practical way to deal with it is by using properly-designed filters. For more details on this subject please visit Library section on OnFILTER’ web site www.onfilter.com.

Safety First!

Miniature Ground Line EMI Filter GLE04-01 is designed to work with parts of the tools that do not use electric power similar to those that are grounded for ESD purposes. Examples would include robotic arms, actuators, etc. Do not connect GLE04-01 in ground line of a motor or other electrical device. OnFILTER offers other models for that purpose.

Ground Line EMI Filters shall never be used in any circuit other than ground. Do not use the filter in circuits that intentionally carry current, such as phase (“live”), neutral, DC power or other lines.

Grounding is a safety element, therefore anything dealing with grounding of equipment must be done by trained professionals and verified. Improperly done or missing ground can cause equipment malfunction or damage, injury to personnel or death. Make sure that implementation of Ground Line EMI Filter is done by trained electrician.

WARNING

- Never use Ground Line EMI Filter in any circuit other than ground
- Do not use Ground Line EMI Filter in power line ground of electrically powered equipment
- Verify proper ground connection after installing the filter
- This filter is not for household use
- No serviceable parts inside - do not open

What is Included

GLE04-01 comes with the following:

- GLE04-01 filter
- Screw #6 with lockwasher - 2 ea.
- Ring terminal for AWG18...22 - 2 ea.
- This User’s Guide

Filter Installation and Connection

Basics

Ground Line EMI Filter GLE04-01 is a non-polar device. It can be connected in ground line in either direction. Connection is done using screw terminals on the body of the filter and supplied ring terminals to which you would need to crimp your ground wire.

Filter Placement

Proper placement of the filter helps to assure its continuous operation for a long time. Please follow these requirements for installation:

- Fasten filter on a flat surface with the connections clearly visible and easily accessible.
- Install filter in a dry location away from clutter and debris and from the possibility of spillage, including from floor and bench cleaning, as well as overheating
- Install filter so that it does not interfere with movement of personnel and machinery.
- Do not install filter in close proximity to parts with high temperature.
- Use proper wire gage per safety regulations.
- Make sure that the wire connections are properly fastened. Do not overtighten connection screws - you can permanently damage the filter.

Filter Care

Normally, filter requires no maintenance and no calibration. It is recommended, though, to periodically inspect filter for overheating, to verify properly tightened connections and to clean its surfaces from dust with dry cloth.

For warranty or other questions contact OnFILTER or its authorized distributors. Full text of warranty can be found in the Library section at www.onfilter.com

Application Examples