

# Ground Line EMI Filter for ESD Grounding Inside Equipment

## Reduce Electrical Overstress (EOS) and Electromagnetic Interference (EMI) in Your Equipment

Noise on electrical ground can cause errors in operation of equipment and in metrology, as well as electrical overstress (EOS) in sensitive components.

Manufacturing process equipment such as IC handlers, wire bonders, SMT pick-and-place machines and many others have various internal metal parts grounded by wires or other means to prevent possibility of electrostatic discharge (ESD). While such grounding works well for equalizing static voltage, at high frequencies there is often a significant voltage between different grounded parts. This voltage is usually caused by servo and variable frequency motors, switched mode power supplies, LED lighting, and other sources.

Patented ground EMI filter GLE04-01 filter connected in line with your ESD in-tool grounding blocks noise from propagating throughout the tool. It provides sub-1 Ohm DC resistance making it compliant with ESD standards while offering significant reduction of noise on grounded parts. Filters are very easy to install and require no maintenance.



### Applications

- ESD ground inside equipment
- Workbenches
- Industrial robotics
- Semiconductor fabrication
- Electronic assembly
- Disk drive manufacturing
- Military
- Wherever EOS and EMI are a problem

### Features

- Greatly reduced electrical noise on ground in equipment
- Optimized for ESD and other grounding inside the equipment
- Miniature size
- Easy installation
- No maintenance or calibration required

### Reduced Ground Noise

OnFILTER miniature ground line filters greatly reduce high-frequency noise on ground and overall noise in the tool which lowers risk of EOS to sensitive components

### Less Errors in Equipment

Reduced electrical noise means less errors in operation of sensitive electronics, test and metrology equipment. Less errors and lockups in test and handling improves your bottom line.

### Reduction of Electrical Overstress (EOS)

Difference in high-frequency voltage between grounded parts in the tools exposes sensitive components to excessive currents that may cause EOS damage. Regular ESD grounding does not resolve high-frequency noise issues. Miniature GLE04-01 EMI ground filters block noise from propagating throughout the tool and prevent EMI-caused EOS

### Complete protection for ESD and EOS

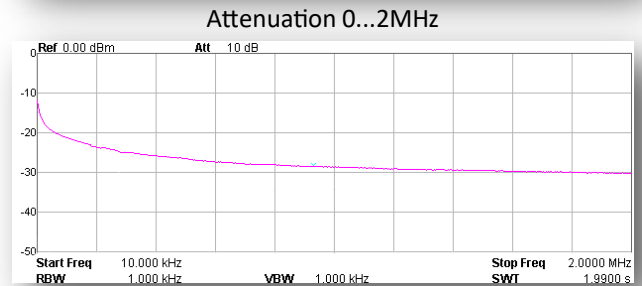
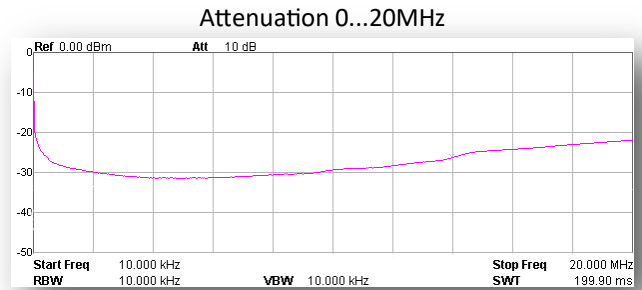
Ground line EMI filter GLE04-01 connected in line with ESD and other grounding inside the tool provides protection against EOS and ESD exposure to sensitive components

## GLE04-01 Ground EMI Filter For ESD Grounding



## Specification

| Parameter                | Value   |
|--------------------------|---|
| Application              | Non current-carrying ground circuits            |
| Nominal DC Resistance    | <0.2Ω   |
| Noise Attenuation (typ.) | > 30dB (30 times)                               |
| Connections              | Screw #6 (supplied with ring terminal)          |
| Polarity                 | Non-polar                                       |
| Dimensions LxWxD         | 2.02" x 1.378" x 0.787"<br>51.3mm x 35mm x 20mm |
| Material                 | ABS plastic                                     |



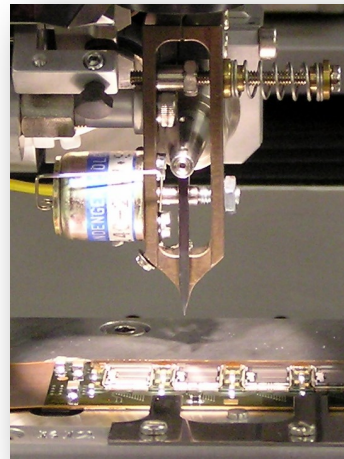
Measured with Tektronix' CT1 Probe

## Application Examples

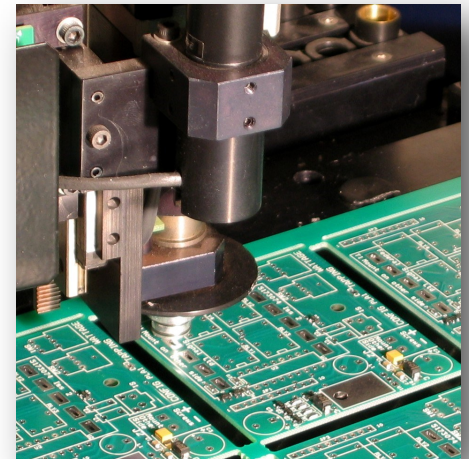
Wafer Test and Handling  
Grounding the chuck



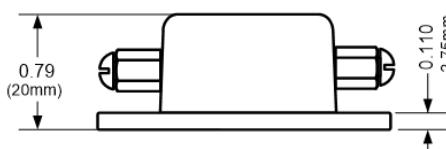
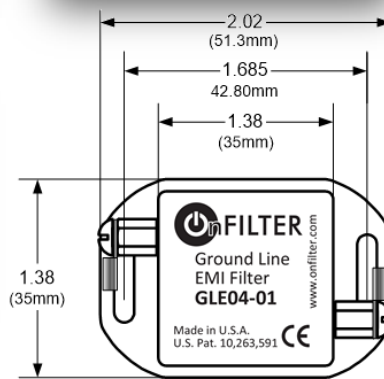
Wire Bonders  
Grounding the tip and wire



IC Handlers, Pick-and-Place  
Grounding the actuators of robotic arms



Any Tool or Workbench  
Grounding wire to Common Point Ground (CPG)



## Ordering Information

**Ground Line EMI Filter GLE04-01**



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All specifications are subject to change without notice. Made in U.S.A.

