

CleanSweep® 3A AC Power Line EMI Filters for Soldering Applications

Reduce Electrical Overstress in Soldering Process

OnFILTER CleanSweep® EMI filters provide noise-free AC power for your workbench. Innovative design accomplishes maximum noise suppression of signals polluting your power lines, lowering harmful high frequency electrical overstress (EOS) current to a negligible amount.

EOS caused by electromagnetic interference is caused mostly by noise on your power lines and ground. High levels of EOS cause component damage, including latent damage. Special design of OnFILTER CleanSweep® filters for soldering applications lowers EOS current tens or even hundreds of times by filtering out power line and ground noise.

CleanSweep® AP series soldering filters are very easy to install - just plug it into the wall outlet, plug your soldering iron into the outlet on the filter and connect ground of your workbench or circuit board to the filter's EMI-filtered ground terminal. They require no calibration or maintenance



Various configurations available

Applications

- Electronic manufacturing
- Semiconductor fabrication
- Service and repair
- Industrial robotics
- Military and aerospace
- Wherever EOS is an issue

Features

- Easy plug-in installation
- Reduction of EMI-caused voltage and current on soldering iron tip
- Helps to comply with IPC-A-610, SEMI E.176 and ESDA STM13.1
- Effective noise suppression for all types of noise

Safe Soldering Environment

OnFILTER' CleanSweep® filters greatly reduce high-frequency current from the tip of soldering irons in presence of noise on power lines and ground and by this greatly reduce high frequency current from the tip of the iron

Compliance with SEMI E.176 and ESDA STM13.1

OnFILTER' CleanSweep® filters will help to bring your soldering process in compliance with voltage and current limits for soldering tip in accordance with the main requirements for electronic assembly

Separate EMI-Free Ground

OnFILTER' CleanSweep® filters provide separate grounding terminal for EMI-free ground compliant with safety and ESD standards

Advanced Surge Protection

OnFILTER' CleanSweep® series filters add substantial performance improvements to conventional surge protection by reducing residual high-voltage "spikes" down to a negligible level

CleanSweep® Power Line AC Filters AP Series for Soldering Applications

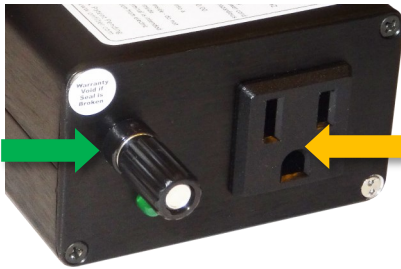


Specification

OnFILTER CleanSweep® filters utilize proprietary technology to provide maximum noise suppression in actual installations, not just in the controlled laboratory environment.

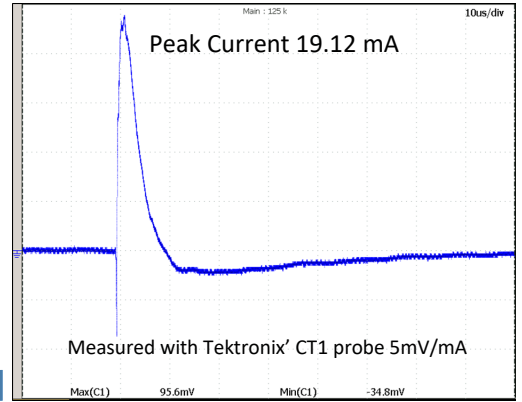
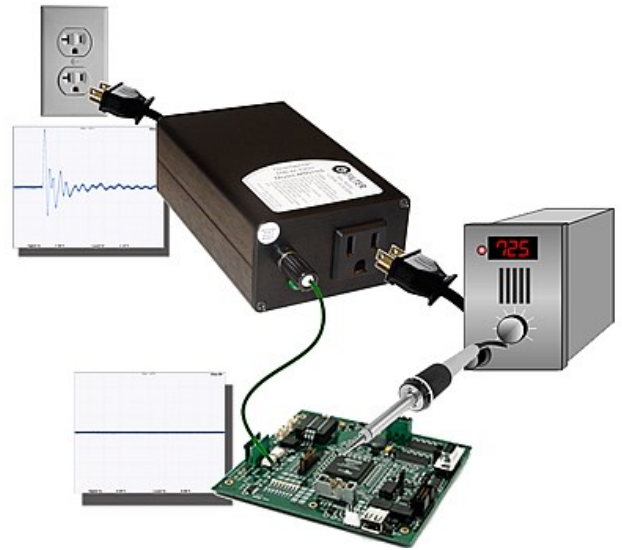
Parameter	AP Soldering Filter
Rated Voltage, RMS	110...250V
Rated Current, RMS	3A
Tip EMI Current Attenuation (Typical)	>20dB (>10 times)
Power Indication	LED
Dimensions (WxDxH)	3.12"x1.85"x5.0" 80mmx47mmx127mm

See separate datasheet for AP series filter for [general applications](#)

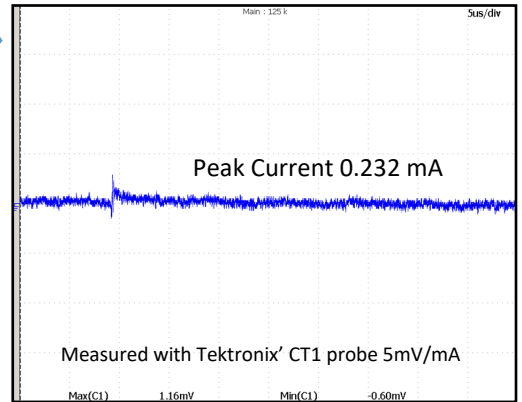


EMI-free ground
for workbench
or fixture

EMI-free power
for soldering iron



Soldering Tip Current—No Filter



Soldering Tip Current with Soldering Filter

Application Notes

If you looking at this datasheet on a computer, you can click on any of the links below to the Application Notes which are available in the [Library](#) on our web site:

- [OnFILTER Advantage - Technology Summary](#)
- [CleanSweep Filters for Soldering Applications](#)
- [CleanSweep® EMI Filter in Surge Protection](#)

Ordering Information

Please select the type of filter most suitable for your application. Most important parameter you need to select is the type of an outlet. Current rating for all soldering filter models is the same - 3A which is sufficient for all soldering irons and majority of rework stations.

More details available in the App. Note "[How to Specify CleanSweep AC Power Line Filter](#)" on our web site.

This example is for a 3A AC single-phase filter for US-type NEMA5-15 outlet with ground filtering for soldering application

Part Number: **APN515LG**

Type of Filter: 3A AC filter - AP

Outlet Code: (see table)

Soldering - L

Application: General - G

Outlet Configuration

OUTLET ORDERING CODE

N515 ~125V 3A	CN1A ~250V 3A
EUSK ~250V 3A	EUUK ~250V 3A



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