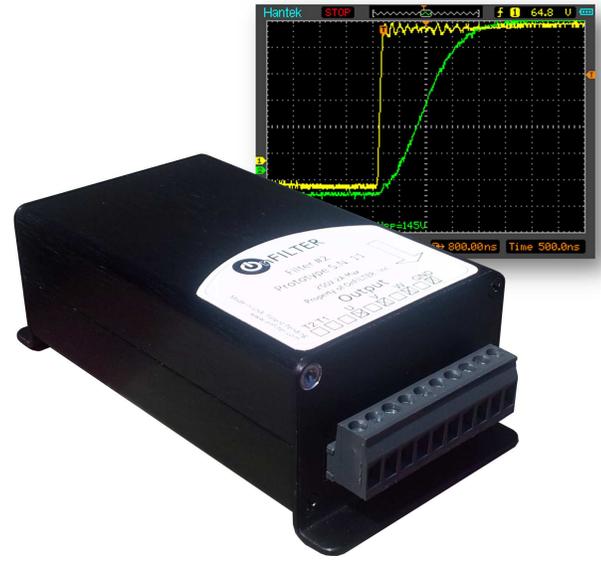


Servo Motor EMI Filters

Reduce Electrical Overstress (EOS) and EMI by Reducing Electrical Noise

Operation of servo and variable frequency motors often causes electrical overstress by introducing high-frequency voltage and currents in the tools' parts. Many production tools such as IC handlers, wire bonders, SMT pick-and-place machines and many others experience excessive noise from servo motors. This noise has substantial energy which can affect yield and reliability of sensitive devices. In addition, interference (EMI) from these motors may negatively influence operation of sensitive electronic equipment.

OnFILTER servo motor EMI filters perform two important functions: they substantially reduce high-frequency noise within the tool resulting from operation of servo and variable frequency motors and improve reliability of motors by stretching rise and fall times of the drive pulses.



Applications

- Semiconductor fabrication
- Electronic assembly
- Disk drive manufacturing
- Industrial robotics
- Military
- Wherever EOS and EMI are a problem

Features

- Greatly reduced noise from servo motor operation
- Easy plug-in installation
- Optimized for most servo motors
- Effective management of rise and fall times of drive pulses

Reduced Ground Noise

OnFILTER servo motor EMI 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. Less errors and lock-ups in test and handling improves your bottom line

Improved Reliability of Servo Motors

OnFILTER servo motor filters reduce voltage overshoots that usually can reach several times the normal voltage value. Such signals cause deterioration of motor bearings leading to the motor's premature failure. OnFILTER' servo motor filters stretch rise and fall times (dV/dt) of the drive pulses preventing resulting voltage overshoots from becoming dangerous.

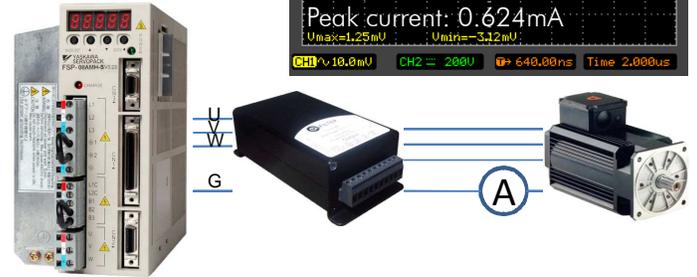
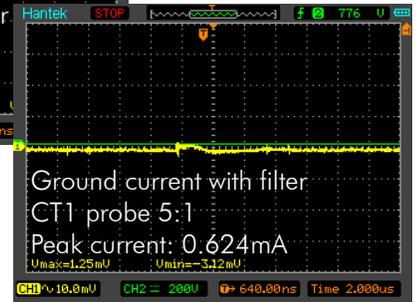
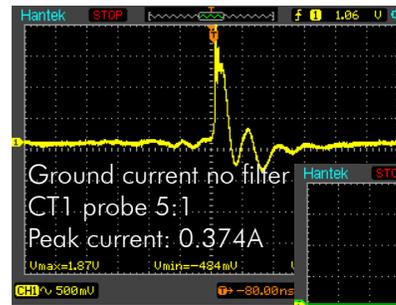
Servo Motor
EMI Filters
SF20031
SF20101



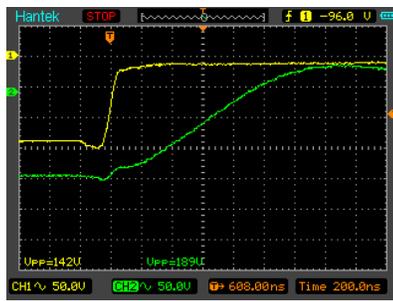
Specification

OnFILTER CleanSweep® filters utilize proprietary technology to provide maximum noise suppression and reduce high-frequency current during soldering.

Parameter	SF20031	SF20101
Phase	3	3
Max. Rated Voltage	250V	250V
Max. Rated Current	3A	10A
Increase of dV/dt (Typical)	10:1	8:1
Dimensions (WxDxH) with mounting flanges	2.6"x5.3"x1.725" 66*135*43.8mm	

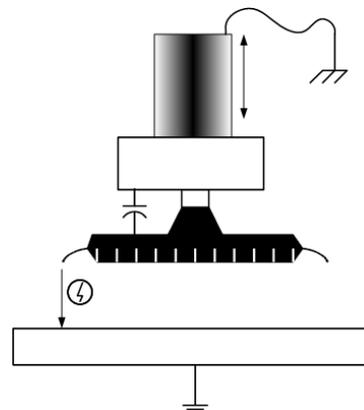


OnFILTER' servo motor EMI filters reduce ground current which is a source of significant EOS in the tool. The data shown is taken with SF20101 filter

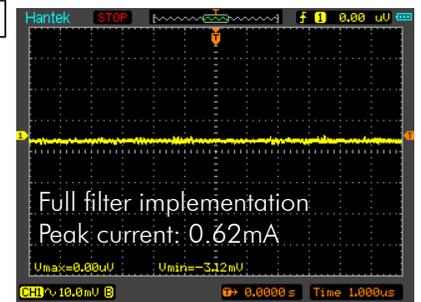
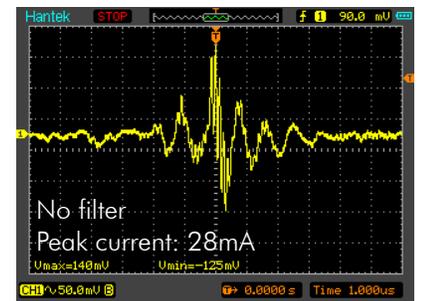


Typical increase of rise/fall times of servo drive pulses with OnFILTER' servo EMI filters. Sharp rise/fall edges of the drive pulses cause significant high-frequency currents

For more details please visit www.onfilter.com and click on Library button for technical papers



Servo motors introduce strong currents through the devices causing electrical overstress. OnFILTER' servo motor EMI filters can reduce these currents to insignificant levels



Ordering Information

OnFILTER' servo motor EMI filters work with the majority of servo amplifiers and motors. You would need to know just two parameters: max. drive voltage and current - both are typically indicated on a label of the motor itself, or on the servo amplifier. Do not exceed specified maximum rating of the filter as this may damage the filter itself, the motor, the servo amplifier and possibly your tool as well.

- Max. rating 250V 3A: SF20031
- Max. rating 250V 10A: SF20101

Contact us for other configurations



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

