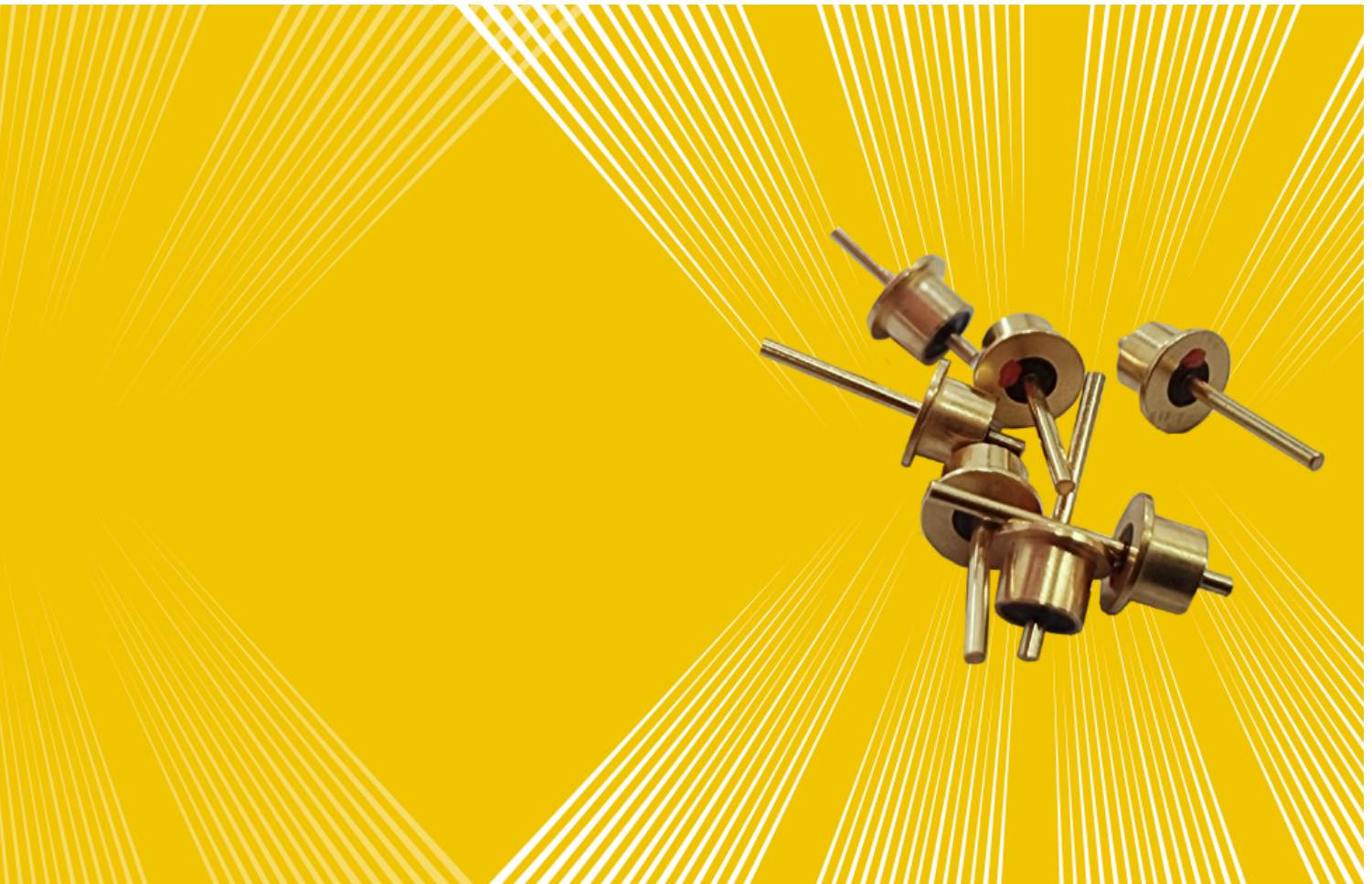


KNOWLES PRECISION DEVICES INTRODUCES THE SFSW SERIES OF HERMETIC, PANEL-MOUNT EMI FILTERS



Electromagnetic interference (EMI) degrades electronic performance and causes unintended outcomes like signal distortion, data corruption and system malfunctions. To minimize interference, Knowles Precision Devices has expanded EMI filter offerings to include hermetically sealed EMI filters that attenuate unwanted EMI signals while allowing desired signals to pass. SFSW series filters were designed to preserve signal integrity and ensure reliable operation in high-reliability applications with strict electromagnetic compatibility standards.

Here's what you can expect from our SFSW series:

Supercapacitors in Electronic Circuits

Hermetic sealing offers the highest level of protection against environmental factors. A sealed housing prevents moisture, dust or gases from impeding filter function, making the SFSW series an excellent choice for high-reliability medical, aerospace and defense applications.

With a compact form factor, SFSW series filters are suitable for space-constrained boards, and in combination with the hermetic seal, their enclosure case can withstand mechanical stress, vibration, and environmental factors like high humidity.

Seamlessly Integrated

By integrating EMI filtering functions directly into PCB layouts using [panel mounts](#), we can streamline integration and simplify the bill of materials (BOM). Standard mounting methods make integration easier and more cost-effective compared to other methods of EMI mitigation.

Since panel mount solutions physically separate filters from other components by mounting directly to the enclosure, they experience less electromagnetic coupling and, by extension, more stable performance. This is particularly important for high-frequency electronics (e.g., 1 GHz) where coupling between components and PCB traces is more likely to cause unintended interactions that degrade filter performance.

Suitable for High-Frequency, High-Impedance Applications

With low attenuation of the desired signal and capacitance values from 10pF to 33nF, SFSW series filters offer exceptional [insertion loss](#) attributes from 1MHz to 1GHz, which minimizes signal degradation and ensures robustness, especially at high frequencies. That said, the electrical configuration of the filter should be chosen to optimize filter performance for a specific source/load impedance scenario.

SFSW series offerings come in a C-filter configuration, where capacitors are placed in parallel with the load. This configuration is suitable for high-impedance source/loads and provides effective filtering against common-mode interference because high-frequency noise is shunted to the ground.

Rigorously Tested

To comply with international legislation like the EU Directive on EMC or the FCC, EMI filtering is an essential element of equipment design. The SFSW series is manufactured to meet strict quality standards and subjected to rigorous testing to ensure each filter delivers consistent and reliable performance.

For detailed SFSW filter series specifications, review the [family datasheet](#). For pricing and availability, visit our [distributor site](#). To discuss your application needs with our engineering team, [contact us](#).

[Learn More](#)

If you need help selecting from our portfolio please [contact us](#) and we can guide you through the selection process.



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