

Overview

A family of feed-through filters using film capacitor technology to achieve good temperature stability. This series are particularly used where high levels of attenuation up to 1GHz are required. The units are housed in robust, sealed, metal containers of threaded construction, and offer a range of terminal finishes.

- Very high attenuation level throughout frequency spectrum
- Self-healing capacitors
- Wide choice of performance options
- Superior pulse current capability
- Excellent temperature stability
- Wire, fast-on or tag termination options

Applications

Specifically designed for military, industrial, telecom and medical applications, but especially suitable for use where fast rising transients are expected.



Technical Specifications

| Item | Parameters/Characteristics |
|-------------------|----------------------------|
| Rated Voltage | 200 VDC |
| Rated Current | 0.5 – 10 A |
| Rated Temperature | 40°C |
| Temperature range | -25°C to 85°C |
| Climate Category | 25/085/21 |
| Voltage Test | 300 VDC |

Typical Electrical Schematic



Technical Specifications cont.

| Part Number | C (nF) | Rated Current at 40°C (A) | Rated Voltage (VDC/VAC) | Voltage Test (VDC) | RDC (mΩ) |
|-------------------|--------|---------------------------|-------------------------|--------------------|----------|
| AFPI100410HP(1)1S | 2x500 | 0.5 | 200/160 | 300 | <700 |
| AFPI100410HF(1)1S | 2x500 | 1 | 200/160 | 300 | <200 |
| AFPI100410HG(1)1S | 2x500 | 3 | 200/160 | 300 | <50 |
| AFPI100410HH(1)1S | 2x500 | 5 | 200/160 | 300 | <10 |
| AFPI100410HJ(1)1S | 2x500 | 10 | 200/160 | 300 | <5 |

(1) Termination: W = Wire
T = Tag

Approvals

| Standard | Certification Body | File Number |
|----------------------------------|--------------------|-------------|
| UL 1283, 5 th Edition | UL | E192374 |

Environmental Compliance

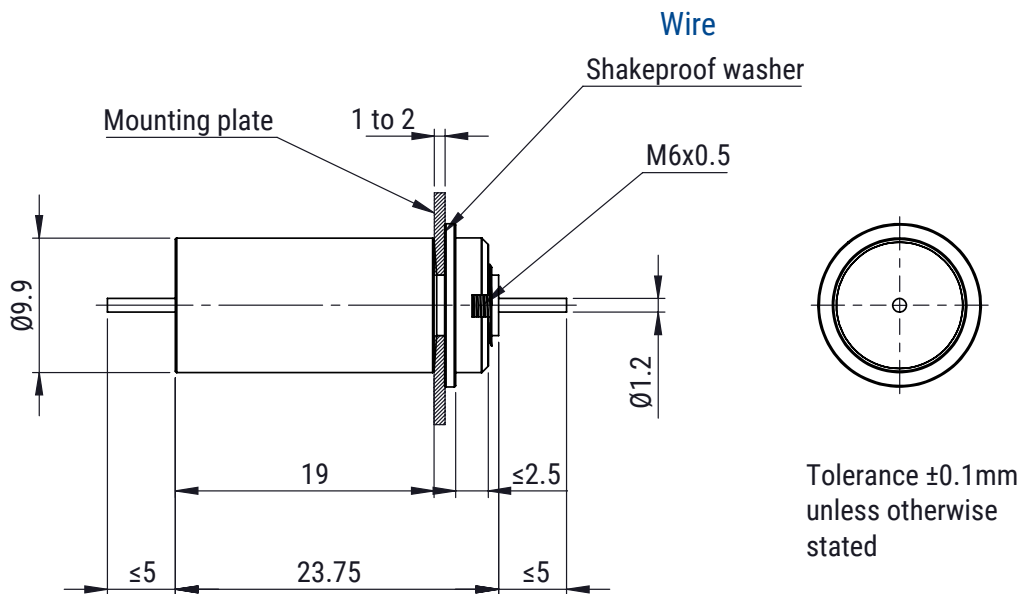
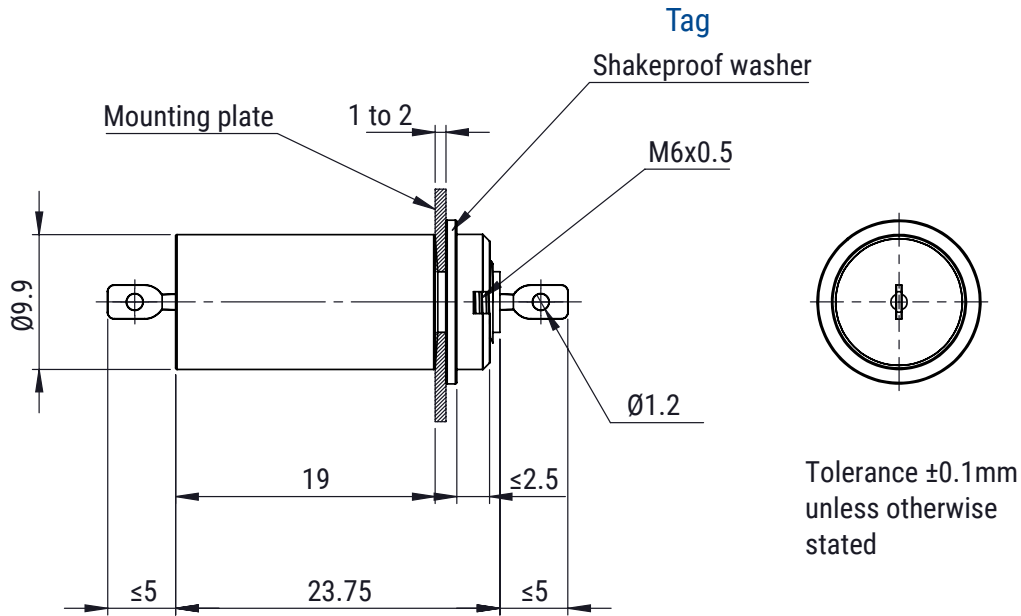
KEMET EMI filters are RoHS Compliant.



Typical Insertion Loss

| Part Number | 50 kHz (dB) | 100 kHz (dB) | 300 kHz (dB) | 1 MHz (dB) | 10 MHz (dB) | 100 MHz (dB) |
|-----------------|-------------|--------------|--------------|------------|-------------|--------------|
| AFPI100410HP-1S | 33 | 52 | 79 | 100 | 100 | 100 |
| AFPI100410HF-1S | 8 | 35 | 66 | 95 | 100 | 100 |
| AFPI100410HG-1S | 8 | 28 | 62 | 93 | 100 | 100 |
| AFPI100410HH-1S | - | 16 | 44 | 74 | 100 | 100 |
| AFPI100410HJ-1S | - | 18 | 29 | 57 | 100 | 100 |

Mechanical Dimensions – Millimeters



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