

AFPI 160, 190

Small Signal Feed-Through Filters

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



Technical Specifications

| Item | Parameters/Characteristics |
|-------------------|----------------------------|
| Rated Voltage | 250 VAC 100 – 600 VDC |
| Rated Current | 6 – 30 A |
| Rated Temperature | 40°C |
| Temperature range | -25°C to 85°C |
| Climate Category | 25/085/21 |
| Voltage Test | 250 – 2,700 VDC |

Applications

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

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) | UL |
|-------------------|-----------|------------------------------|----------------------------|-----------------------|-------------|----|
| AFPI16(1)440DMW3N | 2x2000 | 16 | 100/50 | 250 | <6 | |
| AFPI16(1)320WMW3N | 2x100 | 16 | 440/- | 1400 | <6 | ☐ |
| AFPI16(1)236TMW3N | 2x18 | 16 | 600/250 | 2700 | <6 | ☐ |
| AFPI16(1)150TMW3N | 2x2.5 | 16 | 600/250 | 2700 | <6 | |
| AFPI190410V6C3S | 2x500 | 6 | -/250 | 2121 | <15 | ☐ |
| AFPI19(1)440D3W4N | 2x2000 | 30 | 100/- | 250 | <2 | |
| AFPI19(1)320W3W4N | 2x100 | 30 | 440/- | 1400 | <2 | ☐ |
| AFPI19(1)236T3W4N | 2x18 | 30 | 600/250 | 2700 | <2 | |

- (1) Termination: 0 = Wire terminations fitted at both ends
 1 = 1 x 6.3x0.8 mm Faston fitted at boss end & wire termination at other end
 2 = 2 x 6.3x0.8 mm Faston fitted at both ends

Standard wire length = 40 mm (W) if termination = "0" or "1"
 Wire eye to accept Ø 1.2 mm (C) only for AFPI190410V6C3S

☐ UL Approval

Approvals

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

Environmental Compliance

KEMET EMI filters are RoHS Compliant.

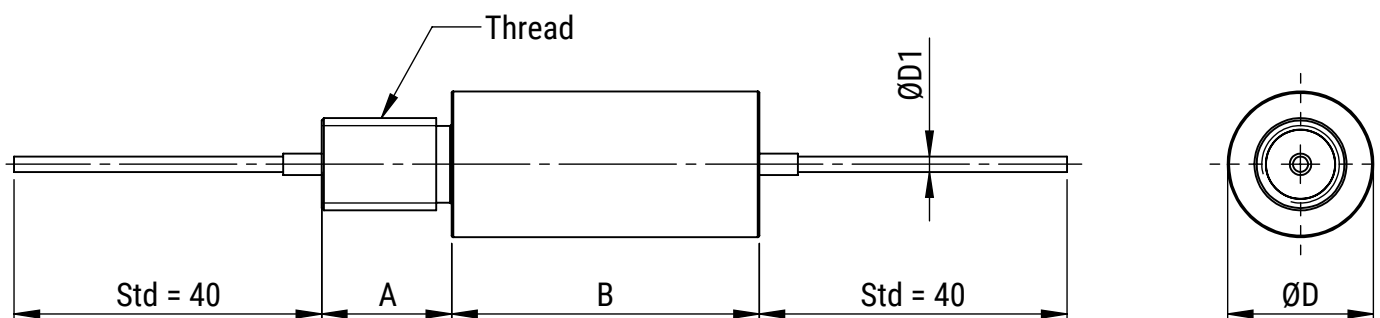


Typical Insertion Loss

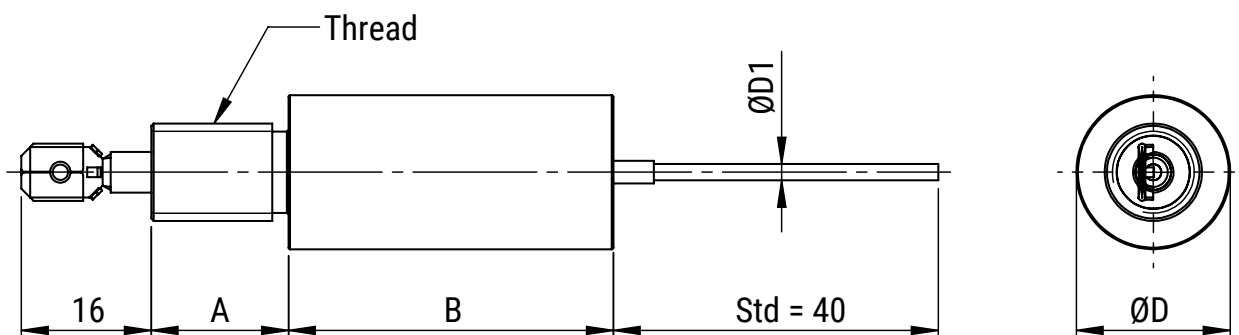
| Part Number | 50 kHz (dB) | 100 kHz (dB) | 300 kHz (dB) | 1 MHz (dB) | 10 MHz (dB) | 100 MHz (dB) |
|-----------------|----------------|-----------------|-----------------|---------------|----------------|-----------------|
| AFPI16-440DMW3N | 60 | 78 | 100 | 100 | 100 | 100 |
| AFPI16-320WMW3N | 6 | 10 | 19 | 50 | 93 | 100 |
| AFPI16-236TMW3N | - | - | 4 | 26 | 71 | 100 |
| AFPI16-150TMW3N | - | - | - | 5 | 36 | 83 |
| AFPI190410V6C3S | - | 23 | 53 | 78 | 100 | 100 |
| AFPI19-440D3W4N | 60 | 78 | 100 | 100 | 100 | 100 |
| AFPI19-320W3W4N | 6 | 10 | 19 | 50 | 93 | 100 |
| AFPI19-236T3W4N | - | - | 4 | 26 | 71 | 100 |

Mechanical Dimensions – Millimeters

AFPI 160 & 190 "W"



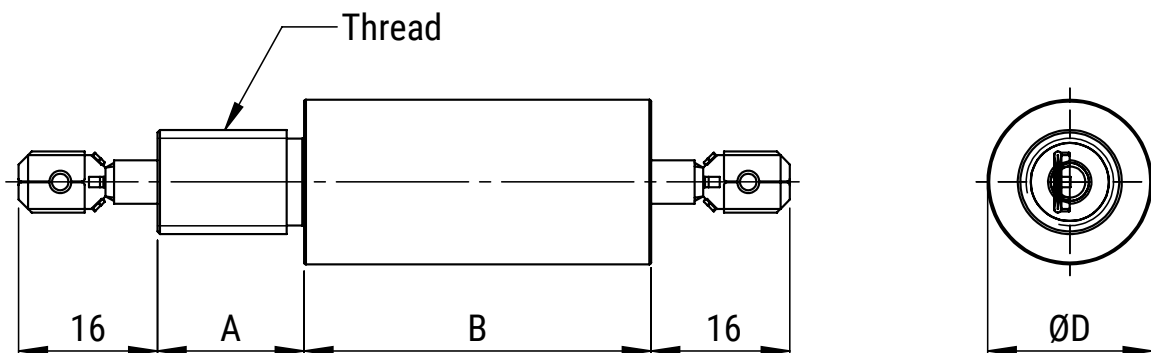
AFPI 161 & 191 "W"



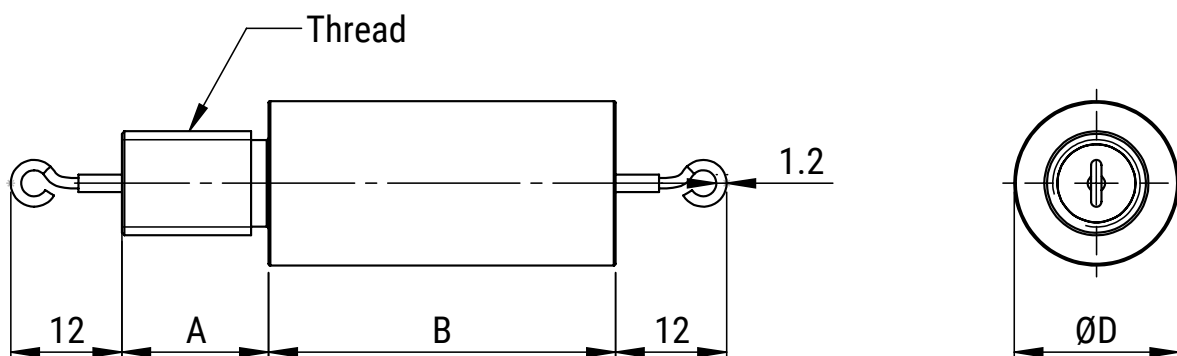
| Part Number | Dimensions (mm) | | | | |
|-----------------|-----------------|----|----|-----|----------|
| | A | B | D | D1 | Thread |
| AFPI16-440DMW3N | 16 | 38 | 16 | 1.2 | M10x0.75 |
| AFPI16-320WMW3N | 12 | 34 | 16 | 1.2 | M10x0.75 |
| AFPI16-236TMW3N | 16 | 34 | 16 | 1.2 | M10x0.75 |
| AFPI16-150TMW3N | 12 | 34 | 16 | 1.2 | M10x0.75 |
| AFPI190410V6C3S | 17 | 75 | 19 | 1.2 | M12x0.75 |
| AFPI19-440D3W4N | 16 | 40 | 19 | 2 | M12x0.75 |
| AFPI19-320W3W4N | 16 | 40 | 19 | 2 | M12x0.75 |
| AFPI19-236T3W4N | 16 | 40 | 19 | 2 | M12x0.75 |

Mechanical Dimensions – Millimeters cont.

AFPI 162 & 192 "W"



AFPI190410V6C3S



| Part Number | Dimensions (mm) | | | | |
|-----------------|-----------------|----|----|-----|----------|
| | A | B | D | D1 | Thread |
| AFPI16-440DMW3N | 16 | 38 | 16 | 1.2 | M10x0.75 |
| AFPI16-320WMW3N | 12 | 34 | 16 | 1.2 | M10x0.75 |
| AFPI16-236TMW3N | 16 | 34 | 16 | 1.2 | M10x0.75 |
| AFPI16-150TMW3N | 12 | 34 | 16 | 1.2 | M10x0.75 |
| AFPI190410V6C3S | 17 | 75 | 19 | 1.2 | M12x0.75 |
| AFPI19-440D3W4N | 16 | 40 | 19 | 2 | M12x0.75 |
| AFPI19-320W3W4N | 16 | 40 | 19 | 2 | M12x0.75 |
| AFPI19-236T3W4N | 16 | 40 | 19 | 2 | M12x0.75 |

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