AFCL 060 Small Signal Feed-Through Filters



Overview

Feed-through filter range using film capacitor technology to achieve good temperature stability. The units are housed in robust, sealed metal cases of threaded construction, and offer a range of terminal finishes.

- Capacitive values from 1,500 pF 47 nF
- Self healing capacitors
- · Wide choice of performance options
- · Superior pulse current capability
- · Excellent temperature stability
- · Wire or tag termination options

Applications

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



Technical Specifications

| Item | Parameters/ Characteristics | |
|-------------------|--------------------------------|--|
| Rated Voltage | 125 - 150 VAC 100 - 630 VDC | |
| Rated Frequency | 400 Hz | |
| Rated Current | 10 A | |
| R _{DC} | 6 mΩ | |
| Rated Temperature | 40°C | |
| Temperature Range | -55°C to 125°C | |
| Climate Category | 55/125/56 | |
| Voltage Test | 160 - 1,000 VDC | |

Typical Electrical Schematic





Technical Specifications cont.

| Part Number | Rated Voltage (VDC/VAC) | C (pF) | Pulse Capability (V/µs) |
|---------------------|----------------------------|-----------|----------------------------|
| AFCL060115NJ(1)1(2) | 630/125 | 1,500 | 2,000 |
| AFCL060150LJ(1)1(2) | 350/125 | 5,000 | 1,200 |
| AFCL060210JJ(1)1(2) | 250/- | 10,000 | 1,200 |
| AFCL060227DJ(1)1(2) | 100/- | 27,000 | 1,200 |
| AFCL060115NJ(1)2(2) | 630/150 | 1,500 | 2,000 |
| AFCL060130NJ(1)2(2) | 630/150 | 3,000 | 2,000 |
| AFCL060210LJ(1)2(2) | 350/125 | 10,000 | 720 |
| AFCL060227JJ(1)2(2) | 250/- | 27,000 | 720 |
| AFCL060247DJ(1)2(2) | 100/- | 47,000 | 720 |

(1) Termination:

W = Wire

T = Tag

(2) Case finish:

T = Tin plated

S = Silver plated

G = Gold plated

Environmental Compliance

KEMET EMI filters are RoHS Compliant.

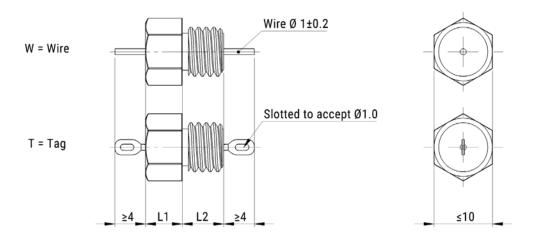


Typical Insertion Loss

| Part Number | 1 MHz (dB) | 10 MHz (dB) | 30 MHz (dB) | 100 MHz (dB) | 400 MHz (dB) |
|-----------------|---------------|----------------|----------------|-----------------|-----------------|
| AFCL060115NJ-1- | - | 8 | 18 | 27 | 43 |
| AFCL060150LJ-1- | - | 16 | 28 | 38 | 53 |
| AFCL060210JJ-1- | - | 20 | 30 | 40 | 58 |
| AFCL060227DJ-1- | 10 | 30 | 40 | 47 | 63 |
| AFCL060115NJ-2- | - | 8 | 18 | 27 | 43 |
| AFCL060130NJ-2- | - | 13 | 25 | 35 | 53 |
| AFCL060210LJ-2- | - | 20 | 30 | 40 | 58 |
| AFCL060227JJ-2- | 10 | 28 | 36 | 45 | 63 |
| AFCL060247DJ-2- | 16 | 37 | 47 | 51 | 68 |



Mechanical Dimensions - Millimeters



| Part Number | Dimensions (mm) | | | |
|-----------------|-----------------|------------|-------------|--|
| | L1 Maximum | L2 Maximum | Thread | |
| AFCL060115NJ-1- | 6.1 | 8 | 5/16-24 UNF | |
| AFCL060150LJ-1- | 6.1 | 8 | 5/16-24 UNF | |
| AFCL060210JJ-1- | 6.1 | 8 | 5/16-24 UNF | |
| AFCL060227DJ-1- | 6.1 | 8 | 5/16-24 UNF | |
| AFCL060115NJ-2- | 6.1 | 12 | 5/16-24 UNF | |
| AFCL060130NJ-2- | 6.1 | 12 | 5/16-24 UNF | |
| AFCL060210LJ-2- | 6.1 | 12 | 5/16-24 UNF | |
| AFCL060227JJ-2- | 6.1 | 12 | 5/16-24 UNF | |
| AFCL060247DJ-2- | 6.1 | 12 | 5/16-24 UNF | |



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