

AFCL 100

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 100 – 820 nF
- Self-healing capacitors
- Wide choice of performance options
- Superior pulse current capability
- Excellent temperature stability
- Wire or tag termination options

Applications

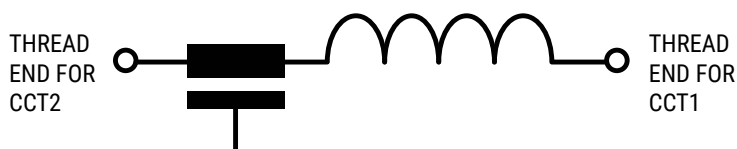
Specifically designed for military, industrial, telecoms and medical applications, but especially suitable for use where fast rising transients are expected.



Technical Specifications

Item	Parameters/ Characteristics
Rated Voltage	115 – 125 VAC 100 – 300 VDC
Rated Frequency	400 Hz
Rated Current	1 – 10 A
Rated Temperature	40°C
Temperature range	-55°C to 125°C
Climate Category	55/125/56
Voltage Test	160 - 560 VDC

Typical Electrical Schematic



Technical Specifications cont.

Part Number	C (nF)	Rated Current at 40°C (A)	Rated Voltage (VDC/VAC)	RDC (mΩ)	Pulse Capability (V/μs)	CCT
AFCL100322LJ(1)(*)(2)	220	10	350/125	6	600	1
AFCL100347JJ(1)(*)(2)	470	10	250/-	6	600	1
AFCL100382DJ(1)(*)(2)	820	10	100/-	6	490	1
AFCL100310LJ(1)(#)(2)	100	10	350/125	6	800	1
AFCL100322JJ(1)(#)(2)	220	10	250/-	6	700	1
AFCL100347DJ(1)(#)(2)	470	10	100/-	6	600	1
AFCL100347DH(1)(*)(2)	470	5	100/-	15	600	1
AFCL100347DG(1)(*)(2)	470	3	100/-	40	600	2
AFCL100347DF(1)(*)(2)	470	1	100/-	200	600	2
AFCL100322JH(1)(*)(2)	220	5	250/-	15	700	2
AFCL100322JG(1)(*)(2)	220	3	250/-	40	700	2
AFCL100322JF(1)(*)(2)	220	1	250/-	200	700	2
AFCL100310LH(1)(*)(2)	100	5	350/115	15	800	2
AFCL100310LG(1)(*)(2)	100	3	350/115	40	800	2
AFCL100310LF(1)(*)(2)	100	1	350/115	200	800	2

(1) Termination: W = Wire
T = Tag

(2) Case finish: T = Tin plated
S = Silver plated

(*) Thread Length 1 = 4.95 mm
2 = 8 mm

(#) Thread Length: 3 = 4.95 mm
4 = 8 mm

Environmental Compliance

KEMET EMI filters are RoHS Compliant.



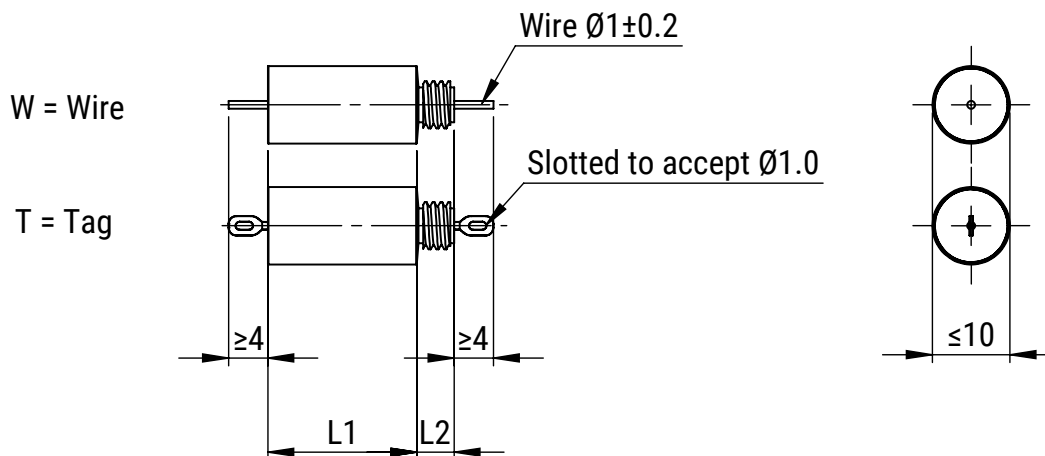
Typical Insertion Loss

Part Number	0.1 MHz (dB)	0.3 MHz (dB)	1 MHz (dB)	10 MHz (dB)	100 MHz (dB)	400 MHz (dB)
AFCL100322LJ-(*)-	9	19	28	46	49	68
AFCL100347JJ-(*)-	11	22	35	48	49	68
AFCL100382DJ-(*)-	22	30	41	46	53	68
AFCL100310LJ-(#)-	–	11	22	40	48	63
AFCL100322JJ-(#)-	–	18	28	46	49	68
AFCL100347DJ-(#)-	11	22	35	48	49	68
AFCL100347DH-(*)-	16	26	38	58	61	68
AFCL100347DG-(*)-	16	27	41	63	63	68
AFCL100347DF-(*)-	26	39	53	65	63	68
AFCL100322JH-(*)-	11	20	30	53	57	63
AFCL100322JG-(*)-	12	23	37	64	62	68
AFCL100322JF-(*)-	20	31	49	70	55	68
AFCL100310LH-(*)-	–	13	25	47	57	68
AFCL100310LG-(*)-	–	16	29	55	61	68
AFCL100310LF-(*)-	14	27	43	61	63	68

(*) Thread Length 1 = 4.95 mm
2 = 8 mm

(#) Thread Length: 3 = 4.95 mm
4 = 8 mm

Mechanical Dimensions – Millimeters



Part Number	Dimensions (mm)			Part Number	Dimensions (mm)		
	L1 Maximum	L2 Maximum	Thread		L1 Maximum	L2 Maximum	Thread
AFCL100322LJ-1-	19.1	4.95	M6x1	AFCL100322JH-1-	19.1	4.95	M6x1
AFCL100347JJ-1-	19.1	4.95	M6x1	AFCL100322JG-1-	19.1	4.95	M6x1
AFCL100382DJ-1-	19.1	4.95	M6x1	AFCL100322JF-1-	19.1	4.95	M6x1
AFCL100322LJ-2-	19.1	8	M6x1	AFCL100310LH-1-	19.1	4.95	M6x1
AFCL100347JJ-2-	19.1	8	M6x1	AFCL100310LG-1-	19.1	4.95	M6x1
AFCL100382DJ-2-	19.1	8	M6x1	AFCL100310LF-1-	19.1	4.95	M6x1
AFCL100310LJ-3-	14.2	4.95	M6x1	AFCL100347DH-2-	19.1	8	M6x1
AFCL100322JJ-3-	14.2	4.95	M6x1	AFCL100347DG-2-	19.1	8	M6x1
AFCL100347DJ-3-	14.2	4.95	M6x1	AFCL100347DF-2-	19.1	8	M6x1
AFCL100310LJ-4-	14.2	8	M6x1	AFCL100322JH-2-	19.1	8	M6x1
AFCL100322JJ-4-	14.2	8	M6x1	AFCL100322JG-2-	19.1	8	M6x1
AFCL100347DJ-4-	14.2	8	M6x1	AFCL100322JF-2-	19.1	8	M6x1
AFCL100347DH-1-	19.1	4.95	M6x1	AFCL100310LH-2-	19.1	8	M6x1
AFCL100347DG-1-	19.1	4.95	M6x1	AFCL100310LG-2-	19.1	8	M6x1
AFCL100347DF-1-	19.1	4.95	M6x1	AFCL100310LF-2-	19.1	8	M6x1

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