

AKCL 100**Small Signal Feed-Through Filters****Overview**

A feed-through filter series utilizing discoidal ceramics for the capacitive element. This robust multilayer structure provides solutions for EMI problems from 30kHz to 1GHz. The filters are housed in robust, sealed metal cylinders with threaded construction, and offer a range of terminal options.

- Very high attenuation level throughout frequency spectrum
- Capacitor value 1.2 μ F rated 80 VDC
- Wide choice of performance options
- Excellent temperature stability
- Hermetic construction

Applications

Specifically designed for military, industrial, telecom and medical applications.

**Technical Specifications**

Item	Parameters/ Characteristics
Rated Voltage	50 VAC 80 VDC
Rated Current	0.06 – 15 A
Capacitance	1.2 μ F
Rated Temperature	40°C
Temperature range	-55°C to 125°C
Climate Category	55/125/56
Voltage Test	200 VDC

Typical Electrical Schematic

Technical Specifications cont.

Part Number	Rated Current at 40°C (A)	RDC (mΩ)	CCT
AKCL100412RK(1)1(2)	15	0.08	1
AKCL100412RK(1)3(2)	15	0.08	1
AKCL100412RA(1)5(2)	0.06	70	1
AKCL101412RA(1)5(2)	0.06	70	2
AKCL100412RB(1)5(2)	0.15	12	1
AKCL101412RB(1)5(2)	0.15	12	2
AKCL100412RC(1)5(2)	0.25	4	1
AKCL101412RC(1)5(2)	0.25	5	2
AKCL100412RD(1)5(2)	0.3	2.3	1
AKCL101412RD(1)5(2)	0.3	2.3	2
AKCL100412RE(1)5(2)	0.45	1.2	1
AKCL101412RE(1)5(2)	0.45	1.2	2
AKCL100412RJ(1)5(2)	10	0.01	1
AKCL101412RJ(1)5(2)	10	0.01	2

(1) Termination: W = Wire
T = Tag

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

Environmental Compliance

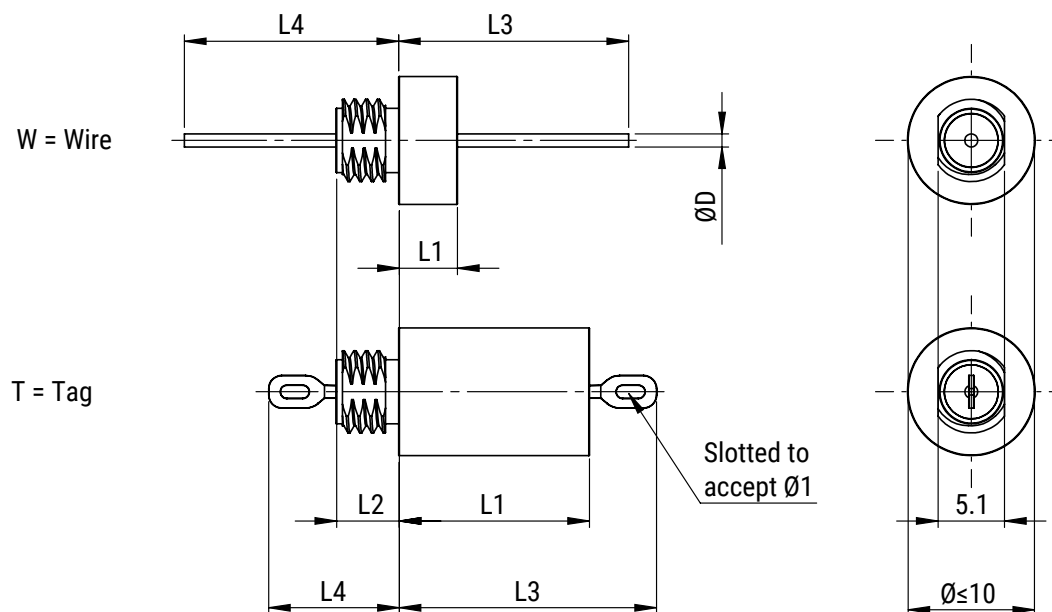
KEMET EMI filters are RoHS Compliant.



Typical Insertion Loss

Part Number	30 kHz (dB)	150 kHz (dB)	300 kHz (dB)	1 MHz (dB)	10 MHz (dB)	1 GHz (dB)
AKCL100412RK-1-	15	28	34	44	60	70
AKCL100412RK-3-	15	28	34	44	60	70
AKCL100412RA-5-	44	70	70	70	70	70
AKCL101412RA-5-	44	70	70	70	70	70
AKCL100412RB-5-	24	52	64	70	70	70
AKCL101412RB-5-	24	52	64	70	70	70
AKCL100412RC-5-	18	42	56	70	70	70
AKCL101412RC-5-	18	42	56	70	70	70
AKCL100412RD-5-	16	35	44	62	70	70
AKCL101412RD-5-	16	35	44	62	70	70
AKCL100412RE-5-	15	31	37	55	70	70
AKCL101412RE-5-	15	31	37	55	70	70
AKCL100412RJ-5-	15	28	33	44	70	70
AKCL101412RJ-5-	15	28	33	44	70	70

Mechanical Dimensions – Millimeters



Part Number	Dimensions (mm)							
	L1 Maximum	L2 Maximum	L3 Maximum Tag	L3 Maximum Wire	L4 Maximum Tag	L4 Maximum Wire	Wire Ø D	Thread
AKCL100412RK-1-	4.6	4.85	8.25	17	8.9	17.2	1	1/4 - 28 UNF
AKCL100412RK-3-	4.6	4.85	8.5	17	8.9	17.2	1.5	1/4 - 28 UNF
AKCL100412RA-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL101412RA-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL100412RB-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL101412RB-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL100412RC-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL101412RC-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL100412RD-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL101412RD-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL100412RE-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL101412RE-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL100412RJ-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF
AKCL101412RJ-5-	14.7	4.85	18.8	27	8.9	17.2	1.5	1/4 - 28 UNF

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