

AFCC 100, 160, 190

Small Signal Feed-Through Capacitors

Overview

Small signal feed-through capacitor series which enable a consistently high frequency performance to be combined with compact mechanical enclosures, significant current capability and terminations which suit the use in many industrial applications. Under AC use, consideration must be given to the leakage current caused by the capacitance value in order to comply with equipment safety specifications. These capacitors are designed so that multiple high frequency resonances are minimized and hence the performance is maintained over the operating frequency range. A wide range of performances are available in various voltage ratings with minimized case sizes to enable better integration within customer applications. The dielectric design of the capacitor elements promotes high level of voltage withstand capability and handling of rapid transients. These products are fully encapsulated in a UL-94 V0 polyurethane resin system.

Applications

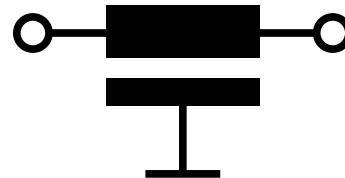
Industrial applications such as telecommunication, medical equipment DC-power systems.



Technical Specifications

Item	Parameters/ Characteristics
Rated Voltage	130 – 250 VAC 100 – 1,000 VDC
Rated Current	5 – 63 A
Rated Temperature	40°C
Voltage Test	250 – 3,750 VDC

Typical Electrical Schematic



Technical Specifications cont.

Part Number	C (nF)	Rated Current at 40°C (A)	Rated Voltage (VDC/VAC)	Voltage Test (VDC)	Climate Category	UL
AFCC100215LKW2S	15	15	350/-	1,500	25/085/21	
AFCC100220UKT8T	20	15	630/-	1,000	55/125/56	
AFCC100250UHW4T	50	5	630/-	1,000	55/125/56	
AFCC100250UKT8T	50	15	630/-	1,000	55/125/56	
AFCC100322JKW3S	220	15	250/-	400	55/125/56	
AFCC100390SKW8T	900	15	150/-	300	25/085/56	
AFCC100390SKW9T	900	15	150/-	300	25/085/56	
AFCC100414SRW9S	1,400	20	150/-	250	25/085/21	
AFCC160125VMW2N	2.5	16	250/-	3,950	25/085/21	
AFCC160218VMW6N	18	16	250/-	2,700	25/085/21	
AFCC160222VMW1N	22	16	250/-	3,750	25/085/21	
AFCC160235VLW3N	35	25	250/-	3,750	25/085/21	
AFCC160250MMW1N	50	16	250/-	3,750	25/085/21	
AFCC160510DMW1N	10,000	16	100/-	250	25/085/21	
AFCC190218W6W9N	18	63	-/130	1,420	25/085/21	☐
AFCC190233VJW4S	33	10	-/250	2,700	25/085/21	
AFCC190310PKW4N	100	15	1,000/-	2,250	25/085/21	
AFCC190322T3W9N	220	30	400/-	800	25/085/21	

☐ UL Approval

Approvals

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

Environmental Compliance

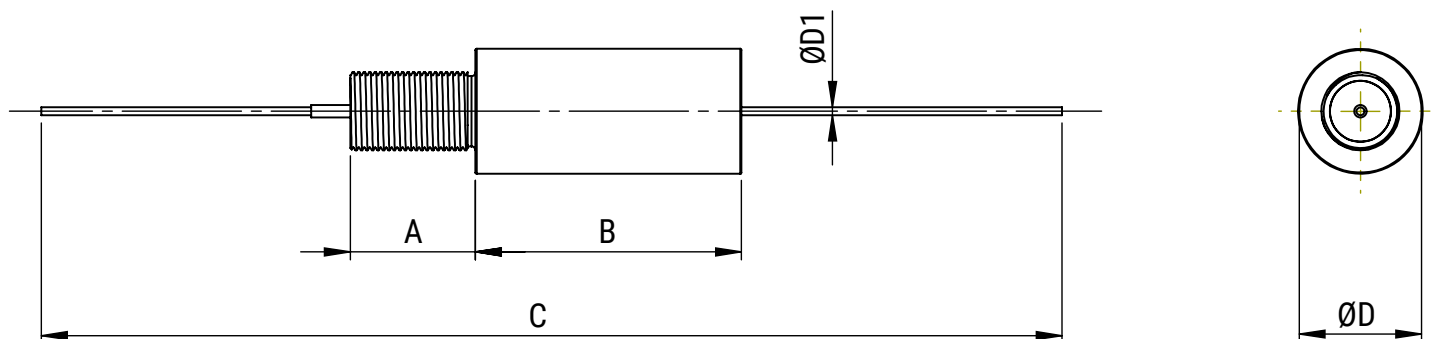
KEMET EMI filters are RoHS Compliant.



Typical Insertion Loss

Part Number	10 kHz (dB)	100 kHz (dB)	1 MHz (dB)	10 MHz (dB)	100 MHz (dB)
AFCC100215LKW2S	-	1	9	29	56
AFCC100220UKT8T	-	1	10	30	54
AFCC100250UHW4T	-	2	25	39	57
AFCC100250UKT8T	-	2	25	39	57
AFCC100322JKW3S	-	10	30	48	60
AFCC100390SKW8T	2	18	35	50	70
AFCC100390SKW9T	2	18	35	50	70
AFCC100414SRW9S	4	26	45	65	65
AFCC160125VMW2N	-	-	2	12	43
AFCC160218VMW6N	-	1	9	29	56
AFCC160222VMW1N	-	1	10	30	54
AFCC160235VLW3N	-	2	15	32	55
AFCC160250MMW1N	-	2	25	39	57
AFCC160510DMW1N	22	43	60	95	100
AFCC190218W6W9N	-	1	9	29	56
AFCC190233VJW4S	-	2	15	32	55
AFCC190310PKW4N	-	5	22	39	67
AFCC190322T3W9N	-	10	30	48	60

Mechanical Dimensions – Millimeters



Part Number	Dimensions (mm)					
	A	B	C	D	D1	Thread
AFCC100215LKW2S	4.75	14	100	10	1.2	M6x0.5
AFCC100220UKT8T	4.75	12	27	10	1.2	M6x0.75
AFCC100250UHW4T	4.75	14	30	10	1.6	M6x0.75
AFCC100250UKT8T	4.75	12	27	10	1.2	M6x0.75
AFCC100322JKW3S	4.75	14	30	10	0.8	M6x1
AFCC100390SKW8T	7.95	10	26	10	1.2	M6x0.75
AFCC100390SKW9T	4.75	10	26	10	1.2	M6x0.75
AFCC100414SRW9S	7.95	19	37	10	1.2	M6x0.5
AFCC160125VMW2N	16	24	120	16	1	M10x0.75
AFCC160218VMW6N	6	14	50	16	1.2	M10x0.75
AFCC160222VMW1N	16	38	135	16	1	M10x0.75
AFCC160235VLW3N	16	34	135	16	1.6	M10x0.75
AFCC160250MMW1N	16	25	121	16	1.2	M10x0.75
AFCC160510DMW1N	16	25	121	16	1.2	M10x0.75
AFCC190218W6W9N	12	16	70	19	M6	M12x0.75
AFCC190233VJW4S	17	40	97	19	1.2	M12x0.75
AFCC190310PKW4N	17	40	97	19	1.2	M12x0.75
AFCC190322T3W9N	14	18	65	19	M6	M16x1

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