

KC11 Series XW Snap-in

Features

- Applications: Power supplies, inverters, photovoltaic, home appliances, audio
- Higher working temperature
- Longer life
- Extra high ripple current rating
- Lifetime: 3000 hours @ 105°C



Specifications

Items	Characteristics	
Operating temperature	-40~+105°C	
Rated working voltage	160~500V	
Nominal Capacitance	56~2200UF	
Leakage current	$I \leq 0.01CV$ or 1.5mA (20°C, 5mins) @ rated Voltage	
Low temperature characteristics (120Hz)	Rated Voltage	160~450
	Z-40°C/Z+20°C	4
Rated Voltage	160~350	400~450
tanδ (20°C, 120Hz)	0.15	0.12

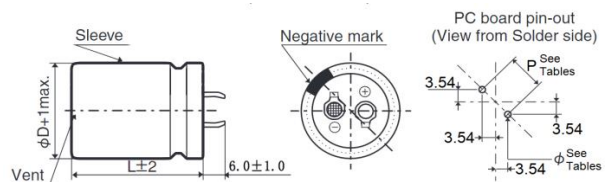
Test Conditions

	Useful life		Load life	Endurance test	Shelf life	
Lifetime (Hours)	5000h	>1000000h	3000h	3000h	1000h	After test: U_R to be applied for 30min > 24h before measurement
Applied voltage	U_R	U_R	U_R	U_R	$U_R=0$	
Applied current	I_R	$1.4 \cdot I_R$	I_R	$I_R=0$	$I_R=0$	
Temperature	105°C	50°C	105°C	105°C	105°C	
Capacitance change	< ±30% of Initial value		< ±20% of Initial value	< ±20% of Initial value	< ±20% of Initial value	
Leakage current	< The specified value		< The specified value	< The specified value	< The specified value	
Dissipation factor tanδ	< ±300% of specified value		< ±200% of specified value	< ±130% of specified value	< ±200% of specified value	

Frequency Coefficient

Voltage(V)	50	120	300	1K	10K	≥50K	Hz
160~250V	0.8	1	1.16	1.3	1.43	1.48	
350~450V	0.78	1	1.15	1.28	1.41	1.43	

Dimensions (mm)



Temperature Coefficient

Temperature(°C)	+45	+60	+85	+95	+105
	2.1	1.9	1.4	1.25	1

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

KC11 Series

Standard rating

Voltage DC	Capacitance (µF)	ESR @ 120Hz, 20°C		Ripple Current (A rms)	Ø Dia x Length (mm)	PCB Holes (mm)		Kormag Part Number
		Maximum (mΩ)	Typical			Pitch (P)	Size (Ø)	
160 (200)	330	603	355	1.42	22*25	10	2	KC11 - 0001 - XW
	390	510	300	1.45	22*25	10	2	KC11 - 0002 - XW
	470	424	245	1.63	22*35	10	2	KC11 - 0003 - XW
	560	355	215	1.75	22*35	10	2	KC11 - 0004 - XW
		355	215	1.75	25*30	10	2	KC11 - 0005 - XW
		355	215	1.75	30*25	10	2	KC11 - 0006 - XW
	680	293	178	1.98	22*40	10	2	KC11 - 0007 - XW
		293	178	1.98	25*35	10	2	KC11 - 0008 - XW
	820	243	145	2.35	22*50	10	2	KC11 - 0009 - XW
		243	145	2.35	25*40	10	2	KC11 - 0010 - XW
		243	145	2.35	30*30	10	2	KC11 - 0011 - XW
		243	145	2.35	35*25	10	2	KC11 - 0012 - XW
	1000	199	115	2.50	25*45	10	2	KC11 - 0013 - XW
		199	115	2.50	30*35	10	2	KC11 - 0014 - XW
		199	115	2.50	35*30	10	2	KC11 - 0015 - XW
	1200	166	95	2.87	25*50	10	2	KC11 - 0016 - XW
		166	95	2.87	30*40	10	2	KC11 - 0017 - XW
		166	95	2.87	35*35	10	2	KC11 - 0018 - XW
	1500	133	75	3.57	30*45	10	2	KC11 - 0019 - XW
		133	75	3.60	35*40	10	2	KC11 - 0020 - XW
	1800	111	75	4.15	35*45	10	2	KC11 - 0021 - XW
	2200	91	58	4.65	35*50	10	2	KC11 - 0022 - XW
200 (250)	220	905	550	1.10	22*25	10	2	KC11 - 0023 - XW
	270	737	460	1.17	22*25	10	2	KC11 - 0024 - XW
	330	603	370	1.40	22*30	10	2	KC11 - 0025 - XW
		603	370	1.40	25*25	10	2	KC11 - 0026 - XW
	390	510	310	1.45	22*30	10	2	KC11 - 0027 - XW
	470	424	260	1.55	22*35	10	2	KC11 - 0028 - XW
		424	260	1.55	25*30	10	2	KC11 - 0029 - XW
		424	260	1.60	30*25	10	2	KC11 - 0030 - XW
	560	355	220	1.65	22*45	10	2	KC11 - 0031 - XW
		355	220	1.65	25*35	10	2	KC11 - 0032 - XW
	680	293	180	1.68	22*50	10	2	KC11 - 0033 - XW
		293	180	1.92	25*40	10	2	KC11 - 0034 - XW
		293	180	1.92	30*30	10	2	KC11 - 0035 - XW
		293	180	2.20	35*25	10	2	KC11 - 0036 - XW
	820	243	150	2.20	25*45	10	2	KC11 - 0037 - XW
		243	150	2.20	30*35	10	2	KC11 - 0038 - XW
		243	150	2.40	35*30	10	2	KC11 - 0039 - XW
	1000	199	120	2.40	30*40	10	2	KC11 - 0040 - XW
		199	120	2.40	35*35	10	2	KC11 - 0041 - XW
	1200	166	100	2.75	30*45	10	2	KC11 - 0042 - XW
		166	100	2.75	35*40	10	2	KC11 - 0043 - XW
	1500	133	80	3.45	35*40	10	2	KC11 - 0044 - XW
1800	111	68	4.00	35*45	10	2	KC11 - 0045 - XW	
2200	91	56	4.50	35*50	10	2	KC11 - 0046 - XW	
250 (300)	180	1106	620	1.00	22*25	10	2	KC11 - 0047 - XW
	220	905	570	1.20	22*30	10	2	KC11 - 0048 - XW
		905	570	1.20	25*25	10	2	KC11 - 0049 - XW
	270	737	570	1.25	22*35	10	2	KC11 - 0050 - XW
	330	603	380	1.30	22*40	10	2	KC11 - 0051 - XW
		603	380	1.35	25*30	10	2	KC11 - 0052 - XW
		603	380	1.35	30*25	10	2	KC11 - 0053 - XW
	390	510	325	1.40	22*45	10	2	KC11 - 0054 - XW
		510	325	1.45	25*35	10	2	KC11 - 0055 - XW
	470	424	268	1.65	22*50	10	2	KC11 - 0056 - XW
		425	269	1.65	30*30	10	2	KC11 - 0057 - XW
		426	270	1.65	35*25	10	2	KC11 - 0058 - XW
	180	1106	620	1.00	22*25	10	2	KC11 - 0059 - XW

Maximum allowable ripple current(A rms) at 105°C 120Hz
 Max ESR, 20°C,120Hz;Type ESR,20°C, 120Hz.

KC11 Series

Standard rating

Voltage DC	Capacitance (µF)	ESR @ 120Hz, 20°C		Ripple Current (A rms)	Ø Dia x Length (mm)	PCB Holes (mm)		Kormag Part Number
		Maximum (mΩ)	Typical			Pitch (P)	Size (Ø)	
250 (300)	220	905	570	1.20	22*30	10	2	KC11 - 0060 - XW
		905	570	1.20	25*25	10	2	KC11 - 0061 - XW
	270	737	570	1.25	22*35	10	2	KC11 - 0062 - XW
		603	380	1.30	22*40	10	2	KC11 - 0063 - XW
	330	603	380	1.35	25*30	10	2	KC11 - 0064 - XW
		603	380	1.35	30*25	10	2	KC11 - 0065 - XW
		510	325	1.40	22*45	10	2	KC11 - 0066 - XW
	390	510	325	1.45	25*35	10	2	KC11 - 0067 - XW
		424	268	1.65	22*50	10	2	KC11 - 0068 - XW
	470	425	269	2.65	30*30	10	2	KC11 - 0069 - XW
		426	270	3.65	35*25	10	2	KC11 - 0070 - XW
		355	225	1.85	25*45	10	2	KC11 - 0071 - XW
	560	355	225	1.85	30*35	10	2	KC11 - 0072 - XW
		355	225	1.85	35*30	10	2	KC11 - 0073 - XW
		293	185	2.20	25*50	10	2	KC11 - 0074 - XW
	680	293	185	2.20	30*40	10	2	KC11 - 0075 - XW
		243	153	2.50	30*45	10	2	KC11 - 0076 - XW
	820	243	153	2.50	30*50	10	2	KC11 - 0077 - XW
		199	125	2.90	30*50	10	2	KC11 - 0078 - XW
	1000	199	125	2.90	35*40	10	2	KC11 - 0079 - XW
166		105	3.30	35*45	10	2	KC11 - 0080 - XW	
1500	133	85	3.80	35*50	10	2	KC11 - 0081 - XW	
350 (400)	68	2927	1280	0.70	22*25	10	2	KC11 - 0082 - XW
	100	1990	1060	0.87	22*30	10	2	KC11 - 0083 - XW
		1990	1060	0.87	25*25	10	2	KC11 - 0084 - XW
	120	1659	880	0.90	22*35	10	2	KC11 - 0085 - XW
		1327	700	0.98	22*40	10	2	KC11 - 0086 - XW
	150	1327	700	1.02	25*30	10	2	KC11 - 0087 - XW
		1327	700	1.02	30*25	10	2	KC11 - 0088 - XW
		1106	580	1.11	22*45	10	2	KC11 - 0089 - XW
	180	1106	580	1.11	25*35	10	2	KC11 - 0090 - XW
		1106	580	1.12	30*30	10	2	KC11 - 0091 - XW
		905	480	1.16	22*50	10	2	KC11 - 0092 - XW
	220	905	480	1.20	25*40	10	2	KC11 - 0093 - XW
		905	480	1.20	35*25	10	2	KC11 - 0094 - XW
		737	390	1.26	25*50	10	2	KC11 - 0095 - XW
	270	737	390	1.31	30*35	10	2	KC11 - 0096 - XW
		737	390	1.26	35*30	10	2	KC11 - 0097 - XW
		603	320	1.45	30*45	10	2	KC11 - 0098 - XW
	330	603	320	1.45	35*35	10	2	KC11 - 0099 - XW
		510	270	1.58	30*50	10	2	KC11 - 0100 - XW
	390	510	270	1.58	35*40	10	2	KC11 - 0101 - XW
424		228	1.69	35*45	10	2	KC11 - 0102 - XW	
560	355	190	1.89	35*50	10	2	KC11 - 0103 - XW	

Maximum allowable ripple current(Arms) at 105°C 120Hz

Max ESR, 20°C,120Hz;Type ESR,20°C, 120Hz.

KC11 Series

Standard rating

Voltage DC	Capacitance (µF)	ESR @ 120Hz, 20°C		Ripple Current (A rms)	Ø Dia x Length (mm)	PCB Holes (mm)		Kormag Part Number
		Maximum (mΩ)	Typical			Pitch (P)	Size (Ø)	
400 (450)	68	2342	1260	0.48	22*25	10	2	KC11 - 0104 - XW
	82	1942	1050	0.57	22*30	10	2	KC11 - 0105 - XW
		1942	1050	0.56	25*25	10	2	KC11 - 0106 - XW
	100	1592	860	0.65	22*35	10	2	KC11 - 0107 - XW
		1592	860	0.65	2*25	10	2	KC11 - 0108 - XW
	120	1327	718	0.71	22*35	10	2	KC11 - 0109 - XW
		1327	718	0.71	35*30	10	2	KC11 - 0110 - XW
		1327	718	0.71	30*25	10	2	KC11 - 0111 - XW
	150	1062	575	0.85	22*40	10	2	KC11 - 0112 - XW
		1062	575	0.85	25*35	10	2	KC11 - 0113 - XW
		1062	575	0.85	30*25	10	2	KC11 - 0114 - XW
	180	885	479	1.00	22*50	10	2	KC11 - 0115 - XW
		885	479	1.00	25*40	10	2	KC11 - 0116 - XW
		885	479	1.00	30*30	10	2	KC11 - 0117 - XW
		885	479	1.00	35*25	10	2	KC11 - 0118 - XW
	220	724	292	1.20	25*45	10	2	KC11 - 0119 - XW
		724	292	1.20	30*35	10	2	KC11 - 0120 - XW
		724	292	1.20	35*30	10	2	KC11 - 0121 - XW
	270	590	319	1.35	25*50	10	2	KC11 - 0122 - XW
		590	319	1.35	30*40	10	2	KC11 - 0123 - XW
590		319	1.35	35*30	10	2	KC11 - 0124 - XW	
330	483	260	1.65	30*45	10	2	KC11 - 0125 - XW	
	483	260	1.65	35*35	10	2	KC11 - 0126 - XW	
390	408	220	1.80	30*50	10	2	KC11 - 0127 - XW	
	408	220	1.80	35*40	10	2	KC11 - 0128 - XW	
470	339	183	2.10	34*45	10	2	KC11 - 0129 - XW	
560	284	154	2.30	35*50	10	2	KC11 - 0130 - XW	
450 (500)	56	2844	1360	0.50	22*25	10	2	KC11 - 0131 - XW
	68	2342	1170	0.60	22*30	10	2	KC11 - 0132 - XW
	82	1942	970	0.65	22*35	10	2	KC11 - 0133 - XW
	100	1592	790	0.72	22*35	10	2	KC11 - 0134 - XW
		1592	790	0.72	25*30	10	2	KC11 - 0135 - XW
		1592	790	0.75	30*25	10	2	KC11 - 0136 - XW
	120	1327	660	0.80	22*45	10	2	KC11 - 0137 - XW
		1327	660	0.80	25*35	10	2	KC11 - 0138 - XW
	150	1062	530	0.95	22*50	10	2	KC11 - 0139 - XW
		1062	530	0.95	25*40	10	2	KC11 - 0140 - XW
		1062	530	0.95	30*30	10	2	KC11 - 0141 - XW
		1062	530	0.95	35*25	10	2	KC11 - 0142 - XW
	180	885	440	1.05	25*45	10	2	KC11 - 0143 - XW
		885	440	1.05	30*35	10	2	KC11 - 0144 - XW
	220	724	360	1.30	25*50	10	2	KC11 - 0145 - XW
		724	360	1.30	30*40	10	2	KC11 - 0146 - XW
		724	360	1.30	35*30	10	2	KC11 - 0147 - XW
	270	590	295	1.50	30*45	10	2	KC11 - 0148 - XW
		590	295	1.50	35*35	10	2	KC11 - 0149 - XW
	330	483	240	1.90	30*50	10	2	KC11 - 0150 - XW
483		240	1.90	35*40	10	2	KC11 - 0151 - XW	
390	408	205	1.90	35*45	10	2	KC11 - 0152 - XW	
470	339	170	2.20	35*50	10	2	KC11 - 0153 - XW	

Maximum allowable ripple current(Arms) at 105°C 120Hz
 Max ESR, 20°C,120Hz;Type ESR,20°C, 120Hz.