MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

KXL Series • 105℃ 1,000~2,000Hrs assured.

Solvent-proof

- Low impedance.
- General
- For SMPS, IP-Board, Adaptor
- RoHS compliant.

KMG → KXL

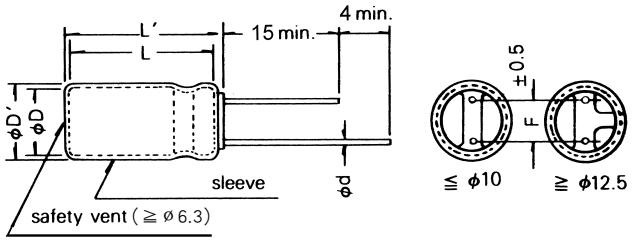
Low Imp.

SPECIFICATIONS

Item	Characteristics
Rated Voltage Range	6.3 ~ 100 V_{DC}
Operating Temperature Range	-55 ~ +105℃
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)
Leakage Current	I=0.03CV (μA) or 4μA, whichever is greater Where, I : Max. leakage current (μA) C: Nominal capacitance (μF) V: Rated voltage(V_{DC}) (at 20℃, 1 minute)
Dissipation Factor (Tan δ)	Rated voltage(V_{DC}): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Tanδ(Max.): 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 / 0.08 / 0.07 When the capacitance exceeds 1.000μF, 0.02 shall be added every 1.000μF increase. (at 20℃, 120Hz)
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V_{DC}): 6.3 / 10 / 16 / 25~100 Z(-25℃)/Z(20℃): 4 / 3 / 2 / 2 Z(-40℃)/Z(20℃): 8 / 6 / 4 / 3 (at 120Hz)
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied at 105℃ for the specified period of time. Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ The initial specified value ØD: ~Ø8 → 1,000 hours; Ø10~ → 2,000 hours
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurement. (Where, 500 Hours ≦8Ø) Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ The initial specified value
Others	Satisfied characteristics W of KS C 6421

DIMENSIONS OF KXL Series

Unit (mm)



Marking : DARK BROWN SLEEVE, SILVER INK

ØD	5	6.3	8	10	12.5	16	18
Ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5

ØD≦8, ØD' ≦ +0.5, L' ≦L+1.5

ØD〉8, ØD' ≦ +0.5, L' ≦L+2.0

RATINGS OF KXL Series

WV (Vdc) / Cap (μF)	6.3 (0J)			10 (1A)			16 (1C)		
	ØD×L	IMP	Ripple	ØD×L	IMP	Ripple	ØD×L	IMP	Ripple
10							5×11	2.2	71
22				5×11	1.6	97	5×11	1.6	107
33	5×11	1.6	107	5×11	1.6	119	5×11	1.6	127
47	5×11	1.6	129	5×11	1.6	139	5×11	1.6	168
68	5×11	1.6	148	5×11	1.6	161	5×11	1.6	189
100	5×11	1.6	172	5×11	1.6	188	6.3×11	0.78	238
220	6.3×11	0.78	290	6.3×11	0.78	322	8×11.5	0.38	414
330	6.3×11	0.78	356	8×11.5	0.38	465	8×11.5	0.38	508
470	8×11.5	0.38	503	8×11.5	0.38	556	10×12.5	0.30	703
680	10×12.5	0.30	703	10×16	0.22	751	10×16	0.22	751
1,000	10×12.5	0.30	703	10×16	0.22	751	10×20	0.16	1,031
2,200	12.5×20	0.12	1,139	12.5×20	0.12	1,139	12.5×25	0.080	1,331
3,300	12.5×25	0.080	1,331	12.5×25	0.080	1,331	16×25	0.070	1,839
4,700	16×25	0.070	1,839	16×25	0.070	1,839	16×31.5	0.055	2,371
6,800	16×25	0.070	1,839	16×31.5	0.055	2,371			
10,000	16×31.5	0.055	2,371						

WV (Vdc) / Cap (μF)	25 (1E)			35 (1V)			50 (1H)		
	ØD×L	IMP	Ripple	ØD×L	IMP	Ripple	ØD×L	IMP	Ripple
2.2							5×11	5.0	63
3.3							5×11	4.3	77
4.7	5×11	4.0	62	5×11	3.8	87	5×11	3.8	92
6.8	5×11	3.2	70	5×11	3.2	106	5×11	3.2	111
10	5×11	2.2	81	5×11	2.2	124	5×11	2.2	134
22	5×11	1.6	113	5×11	1.6	159	5×11	1.6	172
33	5×11	1.6	156	5×11	1.6	178	6.3×11	0.78	220
47	5×11	1.6	188	6.3×11	0.78	230	6.3×11	0.78	263
68	6.3×11	0.78	216	6.3×11	0.78	273	8×11.5	0.38	374
100	6.3×11	0.78	262	8×11.5	0.38	327	8×11.5	0.38	378
220	8×11.5	0.38	457	10×12.5	0.30	703	10×16	0.22	714
330	10×12.5	0.30	703	10×16	0.22	751	10×20	0.16	1,031
470	10×16	0.22	751	10×20	0.16	1,031	12.5×20	0.12	1,335
680	12.5×16	0.18	950	12.5×20	0.12	1,139	12.5×25	0.080	1,571
1,000	12.5×20	0.12	1,139	12.5×25	0.080	1,331	16×25	0.070	1,696
2,200	16×25	0.070	1,839	16×31.5	0.055	2,371			
3,300	16×31.5	0.055	2,371	18×35.5	0.050	2,484			

WV (Vdc) / Cap (μF)	63(1J)			100(2A)		
	ØD×L	IMP	Ripple	ØD×L	IMP	Ripple
0.47	5×11	65.3	38	5×11	31.2	38
0.68	5×11	47.2	45	5×11	22.1	45
1	5×11	31.5	53	5×11	14.7	53
1.5	5×11	22.4	65	5×11	9.80	65
2.2	5×11	15.2	78	5×11	5.40	78
3.3	5×11	11.1	98	5×11	4.60	98
4.7	5×11	10.8	115	5×11	3.90	115
6.8	5×11	4.30	120	6.3×11	3.20	128
10	5×11	2.90	134	6.3×11	1.70	154
15	6.3×11	2.70	188	8×11.5	1.20	222
22	6.3×11	1.36	228	8×11.5	0.82	270
33	8×11.5	0.66	330	10×12.5	0.41	384
47	10×12.5	0.58	327	10×16	0.37	400
68	10×16	0.36	431	10×20	0.27	470
100	10×20	0.29	570	12.5×20	0.27	670
150	10×25	0.20	765	12.5×25	0.21	894
220	12.5×20	0.16	994	16×25	0.17	1,201
330	12.5×25	0.10	1,327	16×25	0.11	1,471
470	16×31.5	0.091	1,518	16×35.5	0.091	1,681
680	16×35	0.065	2,060	18×40	0.072	2,122
1,000	16×35.5	0.049	2,250	18×40	0.051	2,897

Rated Ripple Current (mArms/ 105°C, 100kHz)
Impedance (Ω max./ 20°C, 100kHz)
Case Size ØD×L(mm)

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Cap. (μF) \ Freq. (Hz)	50	120	300	1k	10k	100k
~4.7	0.30	0.40	0.50	0.70	0.80	1.00
5.6~33	0.40	0.50	0.60	0.80	0.90	1.00
39~330	0.60	0.70	0.80	0.90	0.95	1.00
390~1,000	0.65	0.80	0.90	0.98	1.00	1.00
1,200~10,000	0.80	0.90	0.95	0.98	1.00	1.00