

YL Series Useful of 10,000 hours at 105°C



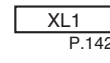
• Conform RoHS

Features

• The YL series is the miniaturization products of 10,000 hours.



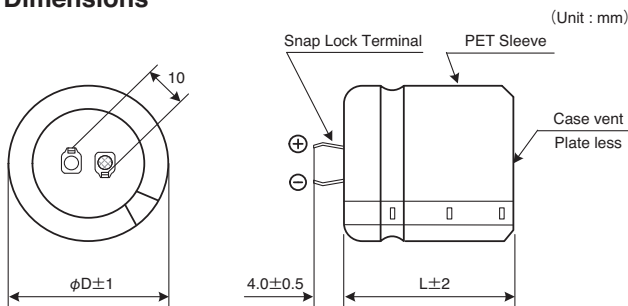
→ Long-life



Product Specifications

Items	Specifications
Temperature range	-25°C ~ +105°C
Rated voltage	400 ~ 500V.DC
Capacitance tolerance	±20% (20°C, 120Hz)
Leakage current	0.02CV (µA) or 3mA, whichever is smaller or less (20°C, after 5 minutes) [C = nominal capacitance (µF), V = rated voltage (V)]
Dissipation factor	Less than the value specified in the standard products table. (20°C, 120Hz)
Permissible ripple current	As specified in the standard product table. (105°C, 120Hz)
Endurance	After the rated voltage with specified ripple current is applied at 105°C for 7,000 hours : Capacitance change : Within ±20% of the initial value measured Dissipation factor : 200% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Shelf life	The following specification shall be meet when the capacitor are restored to 20°C after storage of 500 hours at 105°C with no voltage applied. Before the measurement, the capacitor shall be preconditioned by applying the voltage treatment according to Item 4.1 of JIS C 5101-4. Capacitance change : Within ±15% of the initial value measured Dissipation factor : 175% or less than the initial value specified Leakage current : Less than or equal to the initial value specified
Others	JIS C 5101-4

Dimensions



Ripple current correction coefficient

Temperature (°C)	60	70	85	105	
Correction coefficient	1.9	1.7	1.4	1.0	
Frequency (Hz)	50/60	120	300	1K	≥10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

Terminal permissible current is limited to 10Arms. (Even if calculated the permissible ripple current with the correction coefficient exceeds 10Arms)
Please consult us when the ripple voltage exceeds 70Vp-p.

Product code

(Example) YL Series 400V 82µF ±20%

YL 2G 820 M C X S2 WP EC

- YL: Type of series
- 2G: Rated voltage code
- 820: Capacitance code
- M: Capacitance tolerance code
- C: Terminal code
- X: Case dia code
- S2: Case height code
- WP: Plate code
- EC: Environmental code

Refer to page 118-119 for other terminal shape available on request.

SNAP MOUNT TYPE ALUMINUM ELECTROLYTIC CAPACITORS

YL Series

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μF)	Case size φD×L (mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) (mΩ) 20°C, 100Hz	Product name
400	82	22×25	0.20	0.59	1,170	YL2G820MCXS2WPEC
		22×30	0.20	0.76	800	YL2G121MCXS3WPEC
	120	25×25	0.20	0.75	800	YL2G121MCYS2WPEC
		22×35	0.20	0.89	640	YL2G151MCXS4WPEC
	150	25×30	0.20	0.88	640	YL2G151MCYS3WPEC
		22×40	0.20	1.01	540	YL2G181MCXS5WPEC
	180	25×35	0.20	1.01	540	YL2G181MCYS4WPEC
		30×25	0.20	0.96	540	YL2G181MCZS2WPEC
	220	22×50	0.20	1.20	440	YL2G221MCXS7WPEC
		25×40	0.20	1.17	440	YL2G221MCYS5WPEC
		30×30	0.20	1.12	440	YL2G221MCZS3WPEC
		35×25	0.20	1.10	440	YL2G221MCAS2WPEC
		25×45	0.20	1.34	360	YL2G271MCYS6WPEC
	270	30×35	0.20	1.30	360	YL2G271MCZS4WPEC
		25×50	0.20	1.53	290	YL2G331MCYS7WPEC
	330	35×30	0.20	1.42	290	YL2G331MCAS3WPEC
		30×40	0.20	1.63	250	YL2G391MCZS5WPEC
	390	35×35	0.20	1.61	250	YL2G391MCAS4WPEC
		30×50	0.20	1.91	210	YL2G471MCZS7WPEC
	470	35×40	0.20	1.84	210	YL2G471MCAS5WPEC
560		35×45	0.20	2.08	180	YL2G561MCAS6WPEC
680	35×50	0.20	2.36	150	YL2G681MCAS7WPEC	
420	100	22×30	0.20	0.69	1,020	YL420V101MCXS3WPEC
		25×25	0.20	0.68	1,020	YL420V101MCYS2WPEC
	120	22×35	0.20	0.79	850	YL420V121MCXS4WPEC
		25×30	0.20	0.79	850	YL420V121MCYS3WPEC
	150	22×40	0.20	0.93	680	YL420V151MCXS5WPEC
		25×35	0.20	0.93	680	YL420V151MCYS4WPEC
		30×25	0.20	0.88	680	YL420V151MCZS2WPEC
	180	22×50	0.20	1.09	570	YL420V181MCXS7WPEC
		25×40	0.20	1.06	570	YL420V181MCYS5WPEC
		30×30	0.20	1.02	570	YL420V181MCZS3WPEC
		35×25	0.20	1.00	570	YL420V181MCAS2WPEC
	220	25×45	0.20	1.21	470	YL420V221MCYS6WPEC
		30×35	0.20	1.18	470	YL420V221MCZS4WPEC
		25×50	0.20	1.38	380	YL420V271MCYS7WPEC
	270	30×40	0.20	1.35	380	YL420V271MCZS5WPEC
		35×30	0.20	1.28	380	YL420V271MCAS3WPEC
		30×45	0.20	1.55	310	YL420V331MCZS6WPEC
	330	35×35	0.20	1.48	310	YL420V331MCAS4WPEC
		30×50	0.20	1.74	270	YL420V391MCZS7WPEC
	390	35×40	0.20	1.67	270	YL420V391MCAS5WPEC
470		35×45	0.20	1.90	220	YL420V471MCAS6WPEC

Rated Voltage (V. DC)	Capacitance (μF)	Case size φD×L (mm)	tanδ 20°C, 120Hz	Ripple current (Arms) 105°C, 120Hz	ESR(typ.) (mΩ) 20°C, 100Hz	Product name
450	82	22×30	0.20	0.63	1,250	YL2W820MCXS3WPEC
	100	25×25	0.20	0.68	1,020	YL2W101MCYS2WPEC
	120	22×35	0.20	0.79	850	YL2W121MCXS4WPEC
		25×30	0.20	0.79	850	YL2W121MCYS3WPEC
	150	22×45	0.20	0.96	680	YL2W151MCXS6WPEC
		25×35	0.20	0.93	680	YL2W151MCYS4WPEC
		30×25	0.20	0.88	680	YL2W151MCZS2WPEC
	180	22×50	0.20	1.09	570	YL2W181MCXS7WPEC
		25×40	0.20	1.06	570	YL2W181MCYS5WPEC
		30×30	0.20	1.02	570	YL2W181MCZS3WPEC
		35×25	0.20	1.00	570	YL2W181MCAS2WPEC
	220	25×45	0.20	1.21	470	YL2W221MCYS6WPEC
		30×35	0.20	1.18	470	YL2W221MCZS4WPEC
		35×30	0.20	1.16	470	YL2W221MCAS3WPEC
	270	30×40	0.20	1.35	380	YL2W271MCZS5WPEC
		35×35	0.20	1.34	380	YL2W271MCAS4WPEC
	330	30×45	0.20	1.55	310	YL2W331MCZS6WPEC
	390	30×50	0.20	1.74	270	YL2W391MCZS7WPEC
		35×40	0.20	1.67	270	YL2W391MCAS5WPEC
	470	35×50	0.20	1.96	220	YL2W471MCAS7WPEC
500	100	25×35	0.20	0.67	960	YL2H101MCYS4WPEC
		30×25	0.20	0.64	960	YL2H101MCZS2WPEC
	120	25×40	0.20	0.77	800	YL2H121MCYS5WPEC
		30×30	0.20	0.74	800	YL2H121MCZS3WPEC
		35×25	0.20	0.72	800	YL2H121MCAS2WPEC
	150	25×50	0.20	0.92	640	YL2H151MCYS7WPEC
		30×35	0.20	0.86	640	YL2H151MCZS4WPEC
		35×30	0.20	0.85	640	YL2H151MCAS3WPEC
	180	30×40	0.20	0.98	540	YL2H181MCZS5WPEC
		35×35	0.20	0.97	540	YL2H181MCAS4WPEC
	220	30×45	0.20	1.13	440	YL2H221MCZS6WPEC
		35×40	0.20	1.12	440	YL2H221MCAS5WPEC
270	35×45	0.20	1.28	360	YL2H271MCAS6WPEC	
330	35×50	0.20	1.46	290	YL2H331MCAS7WPEC	

ALUMINUM ELECTROLYTIC CAPACITORS

Life time graph

Useful life depending on ambient temperature Ta and ripple current operating conditions I versus rated ripple current at 105°C, 120Hz.

