

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

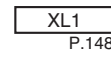
- Conform RoHS

Features

- The YL series is the miniaturization products of 10,000 hours.
- 500V added in the series.



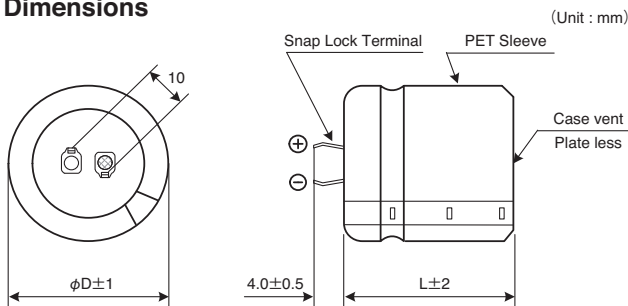
→ Long-life



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 3 mA, 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 products 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

A continuous load should be avoided over 10 Arms at the terminal in accordance with the permissible current.
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

- Type of series
- Capacitance tolerance code
- Capacitance code
- Rated voltage code
- Terminal code
- Case dia code
- Case height code
- Without plate(standard)
- PVC-Free(standard)
- Lead-Free and

Refer to page 124-125 for other terminal shape available on request.

SNAP MOUNT TYPE ALUMINUM ELECTROLYTIC CAPACITORS

Standard Products Table

Rated Voltage (V. DC)	Capacitance (μF)	Case size φD×L (mm)	tanδ 20°C, 120Hz	Ripple current (Arms)		ESR(typ.) (mΩ) 20°C, 100Hz	Product name
				105°C, 120Hz	20°C, 100Hz		
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	
		22×50	0.20	1.20	440	YL2G221MCXS7WPEC	
	220	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	
		330	25×50	0.20	1.53	290	YL2G331MCYS7WPEC
	35×30		0.20	1.42	290	YL2G331MCAS3WPEC	
	390	30×40	0.20	1.63	250	YL2G391MCZS5WPEC	
		35×35	0.20	1.61	250	YL2G391MCAS4WPEC	
	470	30×50	0.20	1.91	210	YL2G471MCZS7WPEC	
		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	
	270	25×50	0.20	1.38	380	YL420V271MCYS7WPEC	
		30×40	0.20	1.35	380	YL420V271MCZS5WPEC	
		35×30	0.20	1.28	380	YL420V271MCAS3WPEC	
	330	30×45	0.20	1.55	310	YL420V331MCZS6WPEC	
		35×35	0.20	1.48	310	YL420V331MCAS4WPEC	
	390	30×50	0.20	1.74	270	YL420V391MCZS7WPEC	
		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)		ESR(typ.) (mΩ) 20°C, 100Hz	Product name
				105°C, 120Hz	20°C, 100Hz		
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	
	270	35×30	0.20	1.16	470	YL2W221MCAS3WPEC	
		270	30×40	0.20	1.35	380	YL2W271MCZS5WPEC
	270		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	
390		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	
	150	35×25	0.20	0.72	800	YL2H121MCAS2WPEC	
		25×50	0.20	0.92	640	YL2H151MCYS7WPEC	
		30×35	0.20	0.86	640	YL2H151MCZS4WPEC	
	180	35×30	0.20	0.85	640	YL2H151MCAS3WPEC	
		30×40	0.20	0.98	540	YL2H181MCZS5WPEC	
	220	35×35	0.20	0.97	540	YL2H181MCAS4WPEC	
		30×45	0.20	1.13	440	YL2H221MCZS6WPEC	
	270	35×40	0.20	1.12	440	YL2H221MCAS5WPEC	
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.

