

LXH Series

- Doesn't spark with DC over voltage
- Same case sizes of KMH
- Endurance with ripple current : 5,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant

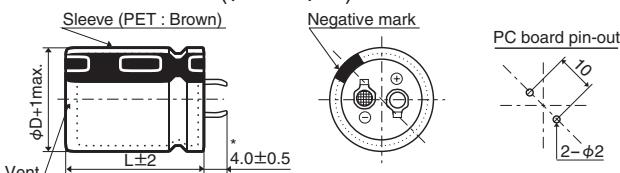


◆SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	-25 to +105°C	
Rated Voltage	200 & 400Vdc	
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)	
Leakage Current	$I=0.02CV$ or 3mA, whichever is smaller. Where, I : Max. leakage current (μ A), C : Nominal capacitance (μ F), V : Rated voltage (V) (at 20°C after 5 minutes)	
Dissipation Factor ($\tan\delta$)	0.15 max. (at 20°C, 120Hz)	
Low Temperature Characteristics	$Z(-25^\circ\text{C})/Z(+20^\circ\text{C}) \leq 4$ (at 120Hz)	
ESL	50nH max. (at 20°C, 1MHz)	
DC Overvoltage Test	When an excessive DC voltage is applied to the capacitors under the test conditions on next page, the vent shall operate and then the capacitors shall become open-circuit without burning materials.	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 or 3,000 hours at 105°C	
	Capacitance change	$\leq \pm 20\%$ of the initial value
	D.F. ($\tan\delta$)	$\leq 200\%$ of the initial specified value
	Leakage current	\leq The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.	
	Capacitance change	$\leq \pm 15\%$ of the initial value
	D.F. ($\tan\delta$)	$\leq 150\%$ of the initial specified value
	Leakage current	\leq The initial specified value

◆DIMENSIONS [mm]

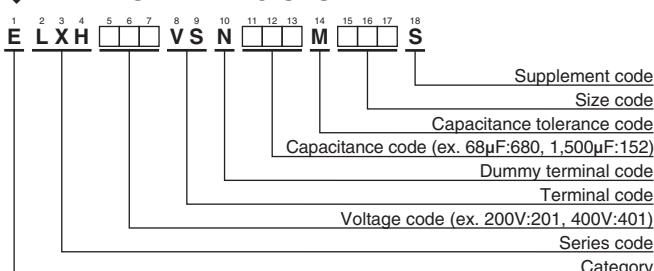
- Terminal Code : VS (ϕ 22 to ϕ 35)



* $\phi D = 35\text{mm} : 3.5 \pm 0.5\text{mm}$

The standard design has no plastic disc.

◆PART NUMBERING SYSTEM



Please refer to "Product code guide (snap-in type)"

◆RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Frequency (Hz)	50	120	300	1k	10k	50k
200Vdc	0.81	1.00	1.17	1.32	1.45	1.50
400Vdc	0.77	1.00	1.16	1.30	1.41	1.43

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.

LXH Series

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/105°C, 120Hz)		Part No.
				5,000 hours	3,000 hours	
200	270	22×25	0.15	0.45	0.87	ELXH201VSN271MP25S
	330	22×30	0.15	0.62	1.20	ELXH201VSN331MP30S
	330	25.4×25	0.15	0.62	1.21	ELXH201VSN331MQ25S
	390	22×35	0.15	0.67	1.31	ELXH201VSN391MP35S
	390	25.4×30	0.15	0.66	1.28	ELXH201VSN391MQ30S
	470	22×40	0.15	0.72	1.40	ELXH201VSN471MP40S
	470	25.4×30	0.15	0.72	1.41	ELXH201VSN471MQ30S
	470	30×25	0.15	0.77	1.50	ELXH201VSN471MR25S
	560	22×45	0.15	0.80	1.56	ELXH201VSN561MP45S
	560	25.4×35	0.15	0.78	1.53	ELXH201VSN561MQ35S
	560	30×30	0.15	0.81	1.57	ELXH201VSN561MR30S
	680	22×50	0.15	0.89	1.74	ELXH201VSN681MP50S
	680	25.4×40	0.15	0.89	1.74	ELXH201VSN681MQ40S
	680	30×30	0.15	0.89	1.74	ELXH201VSN681MR30S
	680	35×25	0.15	0.88	1.72	ELXH201VSN681MA25S
	820	25.4×50	0.15	1.05	2.04	ELXH201VSN821MQ50S
	820	30×35	0.15	1.03	2.00	ELXH201VSN821MR35S
	820	35×30	0.15	1.05	2.04	ELXH201VSN821MA30S
	1,000	30×45	0.15	1.18	2.30	ELXH201VSN102MR45S
	1,000	35×35	0.15	1.18	2.30	ELXH201VSN102MA35S
	1,200	30×50	0.15	1.33	2.60	ELXH201VSN122MR50S
	1,200	35×40	0.15	1.36	2.65	ELXH201VSN122MA40S
	1,500	35×45	0.15	1.57	3.08	ELXH201VSN152MA45S
400	68	22×25	0.15	0.26	0.51	ELXH401VSN680MP25S
	68	25.4×20	0.15	0.24	0.46	ELXH401VSN680MQ20S
	82	22×30	0.15	0.30	0.58	ELXH401VSN820MP30S
	82	25.4×25	0.15	0.30	0.58	ELXH401VSN820MQ25S
	100	22×35	0.15	0.34	0.66	ELXH401VSN101MP35S
	100	25.4×30	0.15	0.34	0.66	ELXH401VSN101MQ30S
	120	22×40	0.15	0.37	0.72	ELXH401VSN121MP40S
	120	25.4×30	0.15	0.37	0.72	ELXH401VSN121MQ30S
	120	30×25	0.15	0.39	0.76	ELXH401VSN121MR25S
	150	22×45	0.15	0.42	0.82	ELXH401VSN151MP45S
	150	25.4×35	0.15	0.43	0.84	ELXH401VSN151MQ35S
	150	30×30	0.15	0.43	0.84	ELXH401VSN151MR30S
	180	22×50	0.15	0.49	0.95	ELXH401VSN181MP50S
	180	25.4×40	0.15	0.48	0.94	ELXH401VSN181MQ40S
	180	30×30	0.15	0.47	0.92	ELXH401VSN181MR30S
	180	35×25	0.15	0.48	0.94	ELXH401VSN181MA25S
	220	25.4×45	0.15	0.55	1.07	ELXH401VSN221MQ45S
	220	30×35	0.15	0.54	1.06	ELXH401VSN221MR35S
	220	35×30	0.15	0.55	1.08	ELXH401VSN221MA30S
	270	25.4×50	0.15	0.62	1.21	ELXH401VSN271MQ50S
	270	30×40	0.15	0.62	1.21	ELXH401VSN271MR40S
	270	35×30	0.15	0.59	1.15	ELXH401VSN271MA30S
	330	30×45	0.15	0.71	1.39	ELXH401VSN331MR45S
	330	35×35	0.15	0.69	1.35	ELXH401VSN331MA35S
	390	30×50	0.15	0.80	1.55	ELXH401VSN391MR50S
	390	35×40	0.15	0.79	1.54	ELXH401VSN391MA40S
	470	35×45	0.15	0.89	1.74	ELXH401VSN471MA45S

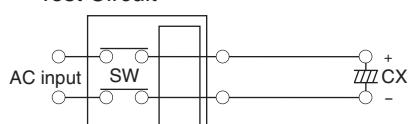
◆DC OVERVOLTAGE TEST CONDITIONS

The vent will operate and the capacitor shall become an open circuit without burning materials when the following test DC voltage is applied.

● Test DC voltage

Rated Voltage	Capacitance	Current limit	Test DC voltage
200Vdc	<330μF	4A	300/375Vdc
	330≤C<470μF	5A	
	≥470μF	7A	
400Vdc	<100μF	2A	500/600Vdc
	100≤C<220μF	4A	
	≥220μF	7A	

● Test Circuit



Constant DC voltage/current power supply