

# LXS Series

- For solar power generation
- Endurance with ripple current : 5,000 hours at 105°C
- Rated voltage range : 160 to 500V
- Downsized from LXQ series
- Non solvent resistant type
- RoHS Compliant



**500V  
Lineup!**



## ◆ SPECIFICATIONS

Items	Characteristics		
<b>Category</b>	-25 to +105°C		
<b>Temperature Range</b>	-25 to +105°C		
<b>Rated Voltage Range</b>	160 to 500V <sub>dc</sub>		
<b>Capacitance Tolerance</b>	±20% (M) (at 20°C, 120Hz)		
<b>Leakage Current</b>	I ≤ 3/CV Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minutes)		
<b>Dissipation Factor (tan δ)</b>	Rated voltage (V <sub>dc</sub> )	160 to 400V	420 to 500V
	tan δ (Max.)	0.15	0.20
<b>Low Temperature Characteristics (Max. Impedance Ratio)</b>	Rated voltage (V <sub>dc</sub> )	160 to 400V	420 to 500V
	Z(-25°C)/Z(+20°C)	4	8
<b>Endurance</b>	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 hours at 105°C.		
	Capacitance change	≤ ±20% of the initial value	
	D.F. (tan δ)	≤ 200% of the initial specified value (500V <sub>dc</sub> : ≤ 250%)	
	Leakage current	≤ The initial specified value	
<b>Shelf Life</b>	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	≤ ±15% of the initial value	
	D.F. (tan δ)	≤ 150% of the initial specified value	
	Leakage current	≤ The initial specified value	

## ◆ DIMENSIONS [mm]

- Terminal Code : VS (φ22 to φ35) : Standard



- Terminal Code : LI (φ30, φ35)



The standard design has no plastic disc.

## ◆ PART NUMBERING SYSTEM



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

## ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.
160	470	22 × 25	0.15	1.47	ELXS161VSN471MP25S	200	1,500	35 × 35	0.15	3.36	ELXS201VSN152MA35S
	680	22 × 30	0.15	1.86	ELXS161VSN681MP30S		1,800	30 × 50	0.15	3.72	ELXS201VSN182MR50S
	680	25.4 × 25	0.15	1.84	ELXS161VSN681MQ25S		1,800	35 × 40	0.15	3.81	ELXS201VSN182MA40S
	820	22 × 35	0.15	2.09	ELXS161VSN821MP35S		2,200	35 × 45	0.15	4.32	ELXS201VSN222MA45S
	820	25.4 × 30	0.15	2.08	ELXS161VSN821MQ30S		2,700	35 × 50	0.15	4.88	ELXS201VSN272MA50S
	1,000	22 × 40	0.15	2.35	ELXS161VSN102MP40S		270	22 × 25	0.15	1.11	ELXS251VSN271MP25S
	1,000	22 × 45	0.15	2.40	ELXS161VSN102MP45S	330	22 × 30	0.15	1.29	ELXS251VSN331MP30S	
	1,000	25.4 × 35	0.15	2.40	ELXS161VSN102MQ35S	390	22 × 35	0.15	1.44	ELXS251VSN391MP35S	
	1,000	30 × 25	0.15	2.50	ELXS161VSN102MR25S	390	25.4 × 25	0.15	1.40	ELXS251VSN391MQ25S	
	1,200	22 × 50	0.15	2.69	ELXS161VSN122MP50S	470	22 × 40	0.15	1.61	ELXS251VSN471MP40S	
	1,200	25.4 × 40	0.15	2.68	ELXS161VSN122MQ40S	470	25.4 × 30	0.15	1.57	ELXS251VSN471MQ30S	
	1,200	30 × 30	0.15	2.77	ELXS161VSN122MR30S	560	22 × 45	0.15	1.79	ELXS251VSN561MP45S	
	1,200	35 × 25	0.15	2.91	ELXS161VSN122MA25S	560	25.4 × 35	0.15	1.79	ELXS251VSN561MQ35S	
	1,500	25.4 × 45	0.15	3.05	ELXS161VSN152MQ45S	560	30 × 25	0.15	1.87	ELXS251VSN561MR25S	
	1,500	30 × 35	0.15	3.17	ELXS161VSN152MR35S	680	22 × 50	0.15	2.02	ELXS251VSN681MP50S	
	1,800	25.4 × 50	0.15	3.40	ELXS161VSN182MQ50S	680	25.4 × 40	0.15	2.02	ELXS251VSN681MQ40S	
	1,800	30 × 40	0.15	3.57	ELXS161VSN182MR40S	680	30 × 30	0.15	2.08	ELXS251VSN681MR30S	
	1,800	35 × 30	0.15	3.62	ELXS161VSN182MA30S	680	35 × 25	0.15	2.19	ELXS251VSN681MA25S	
	2,200	30 × 45	0.15	4.05	ELXS161VSN222MR45S	820	25.4 × 45	0.15	2.26	ELXS251VSN821MQ45S	
	2,200	30 × 50	0.15	4.11	ELXS161VSN222MR50S	820	25.4 × 50	0.15	2.29	ELXS251VSN821MQ50S	
2,200	35 × 35	0.15	4.07	ELXS161VSN222MA35S	820	30 × 35	0.15	2.34	ELXS251VSN821MR35S		
2,700	35 × 40	0.15	4.67	ELXS161VSN272MA40S	820	35 × 30	0.15	2.45	ELXS251VSN821MA30S		
2,700	35 × 45	0.15	4.78	ELXS161VSN272MA45S	1,000	30 × 40	0.15	2.66	ELXS251VSN102MR40S		
3,300	35 × 50	0.15	5.40	ELXS161VSN332MA50S	1,200	30 × 45	0.15	2.99	ELXS251VSN122MR45S		
180	390	22 × 25	0.15	1.34	ELXS181VSN391MP25S	1,200	30 × 50	0.15	3.04	ELXS251VSN122MR50S	
	560	22 × 30	0.15	1.68	ELXS181VSN561MP30S	1,200	35 × 35	0.15	3.00	ELXS251VSN122MA35S	
	560	25.4 × 25	0.15	1.67	ELXS181VSN561MQ25S	1,200	35 × 40	0.15	3.11	ELXS251VSN122MA40S	
	680	22 × 35	0.15	1.90	ELXS181VSN681MP35S	1,500	35 × 45	0.15	3.56	ELXS251VSN152MA45S	
	820	22 × 40	0.15	2.13	ELXS181VSN821MP40S	1,800	35 × 50	0.15	3.98	ELXS251VSN182MA50S	
	820	25.4 × 30	0.15	2.08	ELXS181VSN821MQ30S	180	22 × 25	0.15	0.95	ELXS3B1VSN181MP25S	
	820	25.4 × 35	0.15	2.17	ELXS181VSN821MQ35S	220	22 × 30	0.15	1.10	ELXS3B1VSN221MP30S	
	820	30 × 25	0.15	2.26	ELXS181VSN821MR25S	220	25.4 × 25	0.15	1.10	ELXS3B1VSN221MQ25S	
	1,000	22 × 45	0.15	2.40	ELXS181VSN102MP45S	270	22 × 35	0.15	1.24	ELXS3B1VSN271MP35S	
	1,000	22 × 50	0.15	2.45	ELXS181VSN102MP50S	270	25.4 × 30	0.15	1.25	ELXS3B1VSN271MQ30S	
	1,000	25.4 × 40	0.15	2.45	ELXS181VSN102MQ40S	330	22 × 40	0.15	1.40	ELXS3B1VSN331MP40S	
	1,000	30 × 30	0.15	2.52	ELXS181VSN102MR30S	330	30 × 25	0.15	1.43	ELXS3B1VSN331MR25S	
	1,000	35 × 25	0.15	2.66	ELXS181VSN102MA25S	390	22 × 45	0.15	1.56	ELXS3B1VSN391MP45S	
	1,200	25.4 × 45	0.15	2.73	ELXS181VSN122MQ45S	390	22 × 50	0.15	1.59	ELXS3B1VSN391MP50S	
	1,200	30 × 35	0.15	2.83	ELXS181VSN122MR35S	390	25.4 × 35	0.15	1.57	ELXS3B1VSN391MQ35S	
	1,500	25.4 × 50	0.15	3.10	ELXS181VSN152MQ50S	470	25.4 × 40	0.15	1.76	ELXS3B1VSN471MQ40S	
	1,500	30 × 40	0.15	3.26	ELXS181VSN152MR40S	470	25.4 × 45	0.15	1.79	ELXS3B1VSN471MQ45S	
	1,500	35 × 30	0.15	3.31	ELXS181VSN152MA30S	470	30 × 30	0.15	1.73	ELXS3B1VSN471MR30S	
	1,800	30 × 45	0.15	3.66	ELXS181VSN182MR45S	470	35 × 25	0.15	1.82	ELXS3B1VSN471MA25S	
	1,800	35 × 35	0.15	3.68	ELXS181VSN182MA35S	560	25.4 × 50	0.15	1.99	ELXS3B1VSN561MQ50S	
2,200	30 × 50	0.15	4.11	ELXS181VSN222MR50S	560	30 × 35	0.15	1.93	ELXS3B1VSN561MR35S		
2,200	35 × 40	0.15	4.22	ELXS181VSN222MA40S	560	35 × 30	0.15	2.02	ELXS3B1VSN561MA30S		
2,200	35 × 45	0.15	4.32	ELXS181VSN222MA45S	680	30 × 40	0.15	2.19	ELXS3B1VSN681MR40S		
2,700	35 × 50	0.15	4.88	ELXS181VSN272MA50S	680	30 × 45	0.15	2.25	ELXS3B1VSN681MR45S		
200	390	22 × 25	0.15	1.34	ELXS201VSN391MP25S	680	35 × 35	0.15	2.26	ELXS3B1VSN681MA35S	
	470	22 × 30	0.15	1.54	ELXS201VSN471MP30S	820	30 × 50	0.15	2.51	ELXS3B1VSN821MR50S	
	560	22 × 35	0.15	1.72	ELXS201VSN561MP35S	820	35 × 40	0.15	2.57	ELXS3B1VSN821MA40S	
	560	25.4 × 25	0.15	1.67	ELXS201VSN561MQ25S	1,000	35 × 45	0.15	2.91	ELXS3B1VSN102MA45S	
	680	22 × 40	0.15	1.94	ELXS201VSN681MP40S	1,200	35 × 50	0.15	3.25	ELXS3B1VSN122MA50S	
	680	25.4 × 30	0.15	1.89	ELXS201VSN681MQ30S	120	22 × 25	0.15	0.77	ELXS401VSN121MP25S	
	680	30 × 25	0.15	2.06	ELXS201VSN681MR25S	150	22 × 30	0.15	0.90	ELXS401VSN151MP30S	
	820	22 × 45	0.15	2.17	ELXS201VSN821MP45S	180	22 × 35	0.15	1.02	ELXS401VSN181MP35S	
	820	25.4 × 35	0.15	2.17	ELXS201VSN821MQ35S	180	25.4 × 25	0.15	0.99	ELXS401VSN181MQ25S	
	1,000	22 × 50	0.15	2.45	ELXS201VSN102MP50S	220	22 × 40	0.15	1.15	ELXS401VSN221MP40S	
	1,000	25.4 × 40	0.15	2.45	ELXS201VSN102MQ40S	220	25.4 × 30	0.15	1.13	ELXS401VSN221MQ30S	
	1,000	30 × 30	0.15	2.52	ELXS201VSN102MR30S	220	30 × 25	0.15	1.17	ELXS401VSN221MQ25S	
	1,000	35 × 25	0.15	2.66	ELXS201VSN102MA25S	270	22 × 45	0.15	1.29	ELXS401VSN271MP45S	
	1,200	25.4 × 45	0.15	2.73	ELXS201VSN122MQ45S	270	22 × 50	0.15	1.32	ELXS401VSN271MP50S	
	1,200	25.4 × 50	0.15	2.78	ELXS201VSN122MQ50S	270	25.4 × 35	0.15	1.30	ELXS401VSN271MQ35S	
	1,200	30 × 35	0.15	2.83	ELXS201VSN122MR35S	330	25.4 × 40	0.15	1.47	ELXS401VSN331MQ40S	
	1,200	35 × 30	0.15	2.96	ELXS201VSN122MA30S	330	30 × 30	0.15	1.45	ELXS401VSN331MR30S	
	1,500	30 × 40	0.15	3.26	ELXS201VSN152MR40S	330	35 × 25	0.15	1.52	ELXS401VSN331MA25S	
	1,500	30 × 45	0.15	3.34	ELXS201VSN152MR45S	390	25.4 × 45	0.15	1.63	ELXS401VSN391MQ45S	

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/105°C, 120Hz)	Part No.
400	390	25.4 × 50	0.15	1.66	ELXS401VSN391MQ50S
	390	30 × 35	0.15	1.61	ELXS401VSN391MR35S
	390	35 × 30	0.15	1.68	ELXS401VSN391MA30S
	470	30 × 40	0.15	1.82	ELXS401VSN471MR40S
	470	35 × 35	0.15	1.88	ELXS401VSN471MA35S
	560	30 × 45	0.15	2.04	ELXS401VSN561MR45S
	560	30 × 50	0.15	2.07	ELXS401VSN561MR50S
	560	35 × 40	0.15	2.13	ELXS401VSN561MA40S
	680	35 × 45	0.15	2.40	ELXS401VSN681MA45S
	820	35 × 50	0.15	2.69	ELXS401VSN821MA50S
420	100	22 × 25	0.20	0.70	ELXS421VSN101MP25S
	120	22 × 30	0.20	0.81	ELXS421VSN121MP30S
	120	25.4 × 25	0.20	0.81	ELXS421VSN121MQ25S
	150	22 × 35	0.20	0.93	ELXS421VSN151MP35S
	180	22 × 40	0.20	1.04	ELXS421VSN181MP40S
	180	25.4 × 30	0.20	1.02	ELXS421VSN181MQ30S
	180	30 × 25	0.20	1.06	ELXS421VSN181MR25S
	220	22 × 45	0.20	1.17	ELXS421VSN221MP45S
	220	22 × 50	0.20	1.20	ELXS421VSN221MP50S
	220	25.4 × 35	0.20	1.18	ELXS421VSN221MQ35S
	270	25.4 × 40	0.20	1.33	ELXS421VSN271MQ40S
	270	25.4 × 45	0.20	1.36	ELXS421VSN271MQ45S
	270	30 × 30	0.20	1.31	ELXS421VSN271MR30S
	270	35 × 25	0.20	1.38	ELXS421VSN271MA25S
	330	25.4 × 50	0.20	1.52	ELXS421VSN331MQ50S
	330	30 × 35	0.20	1.48	ELXS421VSN331MR35S
	330	35 × 30	0.20	1.55	ELXS421VSN331MA30S
	390	30 × 40	0.20	1.66	ELXS421VSN391MR40S
	390	30 × 45	0.20	1.70	ELXS421VSN391MR45S
	390	35 × 35	0.20	1.71	ELXS421VSN391MA35S
	470	30 × 50	0.20	1.90	ELXS421VSN471MR50S
	470	35 × 40	0.20	1.95	ELXS421VSN471MA40S
	560	35 × 45	0.20	2.17	ELXS421VSN561MA45S
	680	35 × 50	0.20	2.45	ELXS421VSN681MA50S

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/105°C, 120Hz)	Part No.
450	82	22 × 25	0.20	0.64	ELXS451VSN820MP25S
	120	22 × 30	0.20	0.81	ELXS451VSN121MP30S
	120	22 × 35	0.20	0.83	ELXS451VSN121MP35S
	120	25.4 × 25	0.20	0.81	ELXS451VSN121MQ25S
	150	22 × 40	0.20	0.94	ELXS451VSN151MP40S
	150	25.4 × 30	0.20	0.93	ELXS451VSN151MQ30S
	180	22 × 45	0.20	1.06	ELXS451VSN181MP45S
	180	25.4 × 35	0.20	1.06	ELXS451VSN181MQ35S
	180	30 × 25	0.20	1.06	ELXS451VSN181MR25S
	220	22 × 50	0.20	1.20	ELXS451VSN221MP50S
	220	25.4 × 40	0.20	1.20	ELXS451VSN221MQ40S
	220	30 × 30	0.20	1.18	ELXS451VSN221MR30S
	220	35 × 25	0.20	1.24	ELXS451VSN221MA25S
	270	25.4 × 45	0.20	1.36	ELXS451VSN271MQ45S
	270	25.4 × 50	0.20	1.38	ELXS451VSN271MQ50S
	270	30 × 35	0.20	1.34	ELXS451VSN271MR35S
	270	35 × 30	0.20	1.40	ELXS451VSN271MA30S
	330	30 × 40	0.20	1.52	ELXS451VSN331MR40S
	390	30 × 45	0.20	1.70	ELXS451VSN391MR45S
	390	30 × 50	0.20	1.73	ELXS451VSN391MR50S
	390	35 × 35	0.20	1.71	ELXS451VSN391MA35S
	470	35 × 40	0.20	1.95	ELXS451VSN471MA40S
	470	35 × 45	0.20	1.99	ELXS451VSN471MA45S
	560	35 × 50	0.20	2.22	ELXS451VSN561MA50S
500	100	30 × 25	0.20	0.82	ELXS501VSN101MR25S
	120	30 × 30	0.20	0.91	ELXS501VSN121MR30S
	120	35 × 25	0.20	0.88	ELXS501VSN121MA25S
	150	30 × 35	0.20	1.04	ELXS501VSN151MR35S
	180	30 × 40	0.20	1.17	ELXS501VSN181MR40S
	180	35 × 30	0.20	1.10	ELXS501VSN181MA30S
	220	30 × 45	0.20	1.33	ELXS501VSN221MR45S
	220	35 × 35	0.20	1.23	ELXS501VSN221MA35S
	270	30 × 50	0.20	1.50	ELXS501VSN271MR50S
	270	35 × 40	0.20	1.42	ELXS501VSN271MA40S
330	35 × 45	0.20	1.60	ELXS501VSN331MA45S	
390	35 × 50	0.20	1.78	ELXS501VSN391MA50S	
470	35 × 60	0.20	2.03	ELXS501VSN471MA60S	

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
160 to 250V <sub>dc</sub>	0.81	1.00	1.17	1.32	1.45	1.50
315 to 450V <sub>dc</sub>	0.77	1.00	1.16	1.30	1.41	1.43
500V <sub>dc</sub>	0.70	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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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