

LXS Series

Upgrade!

- For solar power generation
- Added 550V
- Endurance with ripple current : 5,000 hours at 105°C
- Rated voltage range : 160 to 550V
- Downsized from LXQ series
- Non solvent resistant type
- RoHS Compliant

LXM P272
Longer life
LXS
Downsized
Higher ripple
LXQ P278

550V
Lineup!

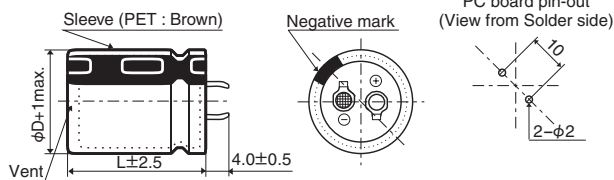


SPECIFICATIONS

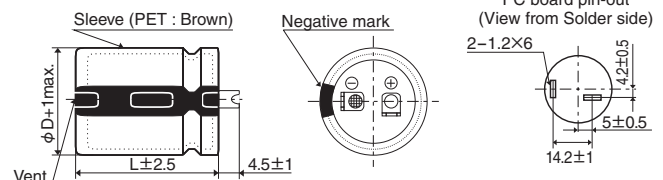
Items	Characteristics			
Category	-25 to +105℃			
Temperature Range	160 to 550V _{dc}			
Rated Voltage Range	±20% (M) (at 20℃, 120Hz)			
Capacitance Tolerance	I≤3√CV			
Leakage Current	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 5 minutes)			
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	160 to 400V	420 to 550V	(at 20℃, 120Hz)
	tan δ (Max.)	0.15	0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	160 to 400V	420 to 550V	(at 120Hz)
	Z(-25℃)/Z(+20℃)	4	8	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ 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℃.			
	Capacitance change	≤ ±20% of the initial value		
	D.F. (tan δ)	≤200% of the initial specified value (500V _{dc} : ≤ 250%, 550V _{dc} : ≤ 300%)		
	Leakage current	≤The initial specified value		
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. 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

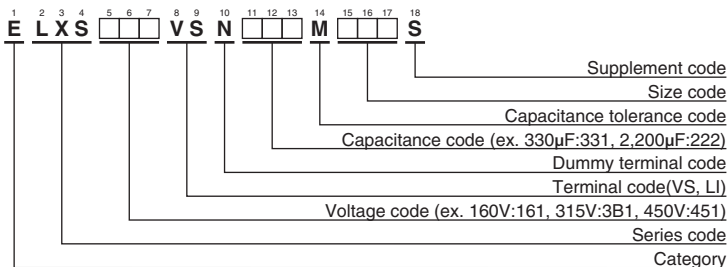


Terminal Code : LI (φ30, φ35)



The standard design has no plastic disc.

PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V _{dc})	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	250	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	315	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	400	560	25.4 × 50	0.15	1.99	ELXS3B1VSN561MQ50S
200	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
	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	ELXS401VSN221MR25S
	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 _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 105°C, 120Hz)	Part No.	WV (V _{dc})	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	450	180	22 × 45	0.20	1.06	ELXS451VSN181MP45S
	390	30 × 35	0.15	1.61	ELXS401VSN391MR35S		180	25.4 × 35	0.20	1.06	ELXS451VSN181MQ35S
	390	35 × 30	0.15	1.68	ELXS401VSN391MA30S		180	30 × 25	0.20	1.06	ELXS451VSN181MR25S
	470	30 × 40	0.15	1.82	ELXS401VSN471MR40S		220	22 × 50	0.20	1.20	ELXS451VSN221MP50S
	470	35 × 35	0.15	1.88	ELXS401VSN471MA35S		220	25.4 × 40	0.20	1.20	ELXS451VSN221MQ40S
	560	30 × 45	0.15	2.04	ELXS401VSN561MR45S		220	30 × 30	0.20	1.18	ELXS451VSN221MR30S
	560	30 × 50	0.15	2.07	ELXS401VSN561MR50S		220	35 × 25	0.20	1.24	ELXS451VSN221MA25S
	560	35 × 40	0.15	2.13	ELXS401VSN561MA40S		270	25.4 × 45	0.20	1.36	ELXS451VSN271MQ45S
	680	35 × 45	0.15	2.40	ELXS401VSN681MA45S		270	25.4 × 50	0.20	1.38	ELXS451VSN271MQ50S
420	820	35 × 50	0.15	2.69	ELXS401VSN821MA50S	450	270	30 × 35	0.20	1.34	ELXS451VSN271MR35S
	100	22 × 25	0.20	0.70	ELXS421VSN101MP25S		270	35 × 30	0.20	1.40	ELXS451VSN271MR30S
	120	22 × 30	0.20	0.81	ELXS421VSN121MP30S		330	30 × 40	0.20	1.52	ELXS451VSN331MR40S
	120	25.4 × 25	0.20	0.81	ELXS421VSN121MQ25S		390	30 × 45	0.20	1.70	ELXS451VSN391MR45S
	150	22 × 35	0.20	0.93	ELXS421VSN151MP35S		390	30 × 50	0.20	1.73	ELXS451VSN391MR50S
	180	22 × 40	0.20	1.04	ELXS421VSN181MP40S		390	35 × 35	0.20	1.71	ELXS451VSN391MA35S
	180	25.4 × 30	0.20	1.02	ELXS421VSN181MQ30S		470	35 × 40	0.20	1.95	ELXS451VSN471MA40S
	180	30 × 25	0.20	1.06	ELXS421VSN181MR25S		470	35 × 45	0.20	1.99	ELXS451VSN471MA45S
	220	22 × 45	0.20	1.17	ELXS421VSN221MP45S		560	35 × 50	0.20	2.22	ELXS451VSN561MA50S
	220	22 × 50	0.20	1.20	ELXS421VSN221MP50S	500	100	30 × 25	0.20	0.82	ELXS501VSN101MR25S
	220	25.4 × 35	0.20	1.18	ELXS421VSN221MQ35S		120	30 × 30	0.20	0.91	ELXS501VSN121MR30S
	270	25.4 × 40	0.20	1.33	ELXS421VSN271MQ40S		120	35 × 25	0.20	0.88	ELXS501VSN121MA25S
	270	25.4 × 45	0.20	1.36	ELXS421VSN271MQ45S		150	30 × 35	0.20	1.04	ELXS501VSN151MR35S
	270	30 × 30	0.20	1.31	ELXS421VSN271MR30S		180	30 × 40	0.20	1.17	ELXS501VSN181MR40S
	270	35 × 25	0.20	1.38	ELXS421VSN271MA25S		180	35 × 30	0.20	1.10	ELXS501VSN181MA30S
	330	25.4 × 50	0.20	1.52	ELXS421VSN331MQ50S		220	30 × 45	0.20	1.33	ELXS501VSN221MR45S
	330	30 × 35	0.20	1.48	ELXS421VSN331MR35S		220	35 × 35	0.20	1.23	ELXS501VSN221MA35S
	330	35 × 30	0.20	1.55	ELXS421VSN331MA30S		270	30 × 50	0.20	1.50	ELXS501VSN271MR50S
	390	30 × 40	0.20	1.66	ELXS421VSN391MR40S		270	35 × 40	0.20	1.42	ELXS501VSN271MA40S
	390	30 × 45	0.20	1.70	ELXS421VSN391MR45S		330	35 × 45	0.20	1.60	ELXS501VSN331MA45S
450	390	35 × 35	0.20	1.71	ELXS421VSN391MA35S		390	35 × 50	0.20	1.78	ELXS501VSN391MA50S
	470	30 × 50	0.20	1.90	ELXS421VSN471MR50S		470	35 × 60	0.20	2.03	ELXS501VSN471MA60S
	470	35 × 40	0.20	1.95	ELXS421VSN471MA40S	550	120	30 × 30	0.20	0.91	ELXS551VSN121MR30S
	560	35 × 45	0.20	2.17	ELXS421VSN561MA45S		150	30 × 35	0.20	1.04	ELXS551VSN151MR35S
	680	35 × 50	0.20	2.45	ELXS421VSN681MA50S		180	30 × 40	0.20	1.17	ELXS551VSN181MR40S
	82	22 × 25	0.20	0.64	ELXS451VSN820MP25S		180	35 × 30	0.20	1.10	ELXS551VSN181MA30S
	120	22 × 30	0.20	0.81	ELXS451VSN121MP30S		220	30 × 50	0.20	1.35	ELXS551VSN221MR50S
	120	22 × 35	0.20	0.83	ELXS451VSN121MP35S		220	35 × 40	0.20	1.28	ELXS551VSN221MA40S
	120	25.4 × 25	0.20	0.81	ELXS451VSN121MQ25S		270	35 × 45	0.20	1.45	ELXS551VSN271MA45S
	150	22 × 40	0.20	0.94	ELXS451VSN151MP40S		330	35 × 50	0.20	1.64	ELXS551VSN331MA50S
	150	25.4 × 30	0.20	0.93	ELXS451VSN151MQ30S		390	35 × 60	0.20	1.85	ELXS551VSN391MA60S

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency(Hz)	50	120	300	1k	10k	50k
160 to 250V _{dc}	0.81	1.00	1.17	1.32	1.45	1.50
315 to 450V _{dc}	0.77	1.00	1.16	1.30	1.41	1.43
500, 550V _{dc}	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.