

VXS SERIES

105°C Charge-Discharge Specification

- Load Life : 105°C 5000 hours.
- Specified the endurance of 100million times Charge-Discharge load.

RoHS
compliance



◆SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	-25~+105℃		
Rated Voltage Range	315~450Vdc		
Capacitance Tolerance	±20% (20℃,120Hz)		
Leakage Current(MAX)	I=3√CV (After 5 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)		
Dissipation Factor(MAX) (tanδ)	0.2 (20℃,120Hz)		
Charge-Discharge endurance	After applying the following charge discharge load for 100million times, the capacitors shall meet the following requirements.		
	Charge voltage	Rated voltage:VR[V]	
	Discharge voltage	Rated Voltage-150V:VR-150 [V]	
	Charge-Discharge frequency	Refer to Standard Size table	
	Charge-Discharge Resistance	Refer to Standard Size table	
	Capacitance Change	Within ±20% of the initial value.	
	Dissipation Factor	Not more than 200% of the specified value.	
	Leakage Current	Not more than the specified value.	
Endurance	After applying rated voltage with rated ripple current for 5000 hours at 105℃, the capacitors shall meet the following requirements.		
	Capacitance Change	Within ±20% of the initial value.	
	Dissipation Factor	Not more than 200% of the specified value.	
	Leakage Current	Not more than the specified value.	
Low Temperature Stability Impedance Ratio(MAX)	Rated Voltage (Vdc)	315~450	(120Hz)
	Z(-25℃)/Z(20℃)	8	

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	60(50)	120(100)	300	500	1k	10k≤
Coefficient	0.80	1.00	1.16	1.20	1.30	1.40

◆OPTION

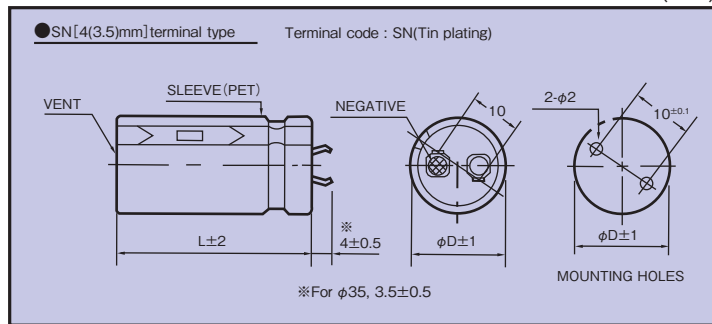
PET sleeve without plate	Code EFC
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◆PART NUMBER

□□□ VXS □□□□□ M □□□ SN D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆ DIMENSIONS

(mm)



◆ STANDARD SIZE

Vdc Cap(μF) φD	315								350															
	φ22		φ25		φ30		φ35		φ22		φ25		φ30		φ35									
120									22×25:0.92	46	10													
150	22×25:1.00	46	10						22×30:1.08	41	10	25×25:1.05	51	10										
180	22×30:1.15	41	10						22×35:1.22	37	10	25×30:1.21	38	10										
220	22×35:1.32	37	10	25×25:1.19	43	10			22×40:1.39	34	10	25×30:1.30	38	10	30×25:1.35	38	10							
270	22×40:1.50	34	10	25×30:1.38	38	9	30×25:1.44	38	9	22×45:1.57	32	10	25×35:1.49	35	10	30×30:1.56	42	8	35×25:1.50	36	10			
330	22×45:1.69	32	9	25×35:1.58	35	8	30×30:1.67	34	7	22×50:1.77	31	9	25×40:1.68	32	9	30×35:1.78	31	8	35×30:1.75	32	8			
390	22×50:1.88	30	8	25×40:1.77	32	7	30×30:1.76	34	6	35×25:1.64	35	7	22×55:1.96	28	8	25×45:1.87	30	8	30×35:1.89	31	7	35×30:1.83	32	8
470	22×60:2.15	27	7	25×45:1.98	30	7	30×35:2.01	31	6	35×30:1.92	31	6			25×50:2.08	29	7	30×40:2.13	29	6	35×35:2.08	29	7	
560				25×50:2.20	28	6	30×40:2.25	29	5	35×35:2.18	29	6			25×60:2.38	25	7	30×45:2.37	27	6	35×40:2.33	27	6	
680				25×60:2.53	25	5	30×45:2.51	27	4	35×40:2.49	27	4						30×50:2.63	26	5	35×45:2.60	25	5	
820							30×50:2.79	26	4	35×45:2.73	25	4						30×60:3.01	22	5	35×50:2.87	24	5	
1000							30×60:3.20	22	4	35×50:3.01	24	4									35×55:3.15	22	4	
1200										35×55:3.28	22	3									35×60:3.42	20	3	

Vdc Cap(μF) ϕD	385								400							
	ϕ22		ϕ25		ϕ30		ϕ35		ϕ22		ϕ25		ϕ30		ϕ35	
100	22x25	0.84 46 10							22x25	0.85 46 10						
120	22x30	0.97 41 10							22x30	0.97 41 10	25x25	0.96 42 10				
150	22x35	1.12 37 10	25x25	1.04 43 10					22x35	1.13 37 10	25x30	1.11 38 10				
180	22x40	1.26 34 10	25x30	1.19 38 10	30x25	1.24 38 10			22x40	1.27 34 10	25x30	1.20 38 10	30x25	1.24 38 10		
220	22x45	1.43 32 10	25x35	1.37 35 10	30x30	1.43 34 10	35x25	1.39 43 10	22x45	1.44 32 10	25x35	1.37 35 10	30x30	1.43 34 10	35x25	1.39 35 10
270	22x50	1.61 30 10	25x40	1.55 32 10	30x30	1.55 34 9	35x30	1.62 32 10	22x50	1.62 31 9	25x40	1.55 32 10	30x35	1.63 31 9	35x30	1.62 32 10
330	22x55	1.82 29 10	25x45	1.75 30 10	30x35	1.76 31 8	35x30	1.72 32 9	22x60	1.87 27 9	25x50	1.82 28 10	30x35	1.77 31 8	35x30	1.72 32 9
390			25x50	1.93 29 9	30x40	1.97 29 7	35x35	1.95 29 8			25x55	2.01 26 9	30x40	1.97 29 8	35x35	1.95 29 8
470			25x55	2.14 26 7	30x45	2.20 27 7	35x40	2.19 27 7			25x60	2.22 25 8	30x50	2.29 26 8	35x40	2.19 27 7
560					30x50	2.44 26 6	35x45	2.43 25 7					30x55	2.53 25 7	35x45	2.43 25 7
680					30x55	2.70 24 6	35x50	2.70 24 6					30x60	2.80 23 6	35x50	2.69 24 6
820							35x55	2.97 22 5							35x55	2.96 22 5
1000							35x60	3.25 21 4								

Vdc Cap(μF) ΦD	420								450							
	Φ22		Φ25		Φ30		Φ35		Φ22		Φ25		Φ30		Φ35	
82	22x25	0.76 46 10							22x25	0.77 46 10						
100	22x30	0.88 41 10							22x30	0.89 41 10						
120	22x30	0.96 41 10	25x25	0.94 42 10					22x35	1.01 37 10	25x25	0.94 42 10				
150	22x35	1.11 37 10	25x30	1.09 38 10					22x40	1.16 34 10	25x30	1.10 38 10	30x25	1.14 38 10		
180	22x40	1.25 34 10	25x35	1.24 35 10	30x25	1.22 38 10			22x45	1.30 32 10	25x35	1.25 35 10	30x30	1.30 34 10	35x25	1.28 35 10
220	22x50	1.46 30 10	25x35	1.34 35 10	30x30	1.41 34 10	35x25	1.37 35 10	22x50	1.47 30 10	25x40	1.42 32 10	30x30	1.41 34 10	35x30	1.48 32 10
270	22x55	1.64 29 10	25x45	1.59 30 10	30x35	1.61 31 10	35x30	1.58 32 10	22x60	1.70 27 10	25x45	1.60 30 10	30x35	1.62 31 10	35x30	1.59 32 10
330			25x50	1.79 28 10	30x40	1.82 29 10	35x35	1.81 29 10			25x55	1.86 27 10	30x40	1.83 29 10	35x35	1.81 29 10
390			25x55	1.97 27 9	30x45	2.02 27 9	35x35	1.91 29 8			25x60	2.04 25 9	30x50	2.11 32 9	35x40	2.02 27 9
470					30x50	2.25 26 8	35x40	2.14 27 7					30x55	2.34 24 8	35x45	2.26 25 8
560					30x55	2.48 24 7	35x45	2.38 25 7								
680							35x50	2.63 24 6							35x50	2.49 24 7
820							35x60	3.02 21 5								

↑↑↑↑↑
 Charge-Discharge Frequency[Hz]
 Charge-Discharge Resistance[Ω]
 Ripple Current (A r.m.s./120Hz,105°C)
 Case Size φD×L(mm)