

VXG SERIES

105°C 5000 hours Miniaturized, Snap-in Terminal Type

◆ **FEATURES**

- Load Life : 105°C 5000 hours.
- Smaller size with higher ripple current endurance than VXP series.
- RoHS compliance.



◆ **SPECIFICATIONS**

Items	Characteristics																							
Category Temperature Range	-40 ~ +105°C	-25 ~ +105°C																						
Rated Voltage Range	10 ~ 100V.DC	200 ~ 450V.DC																						
Capacitance Tolerance	±20% (20°C, 120Hz)																							
Leakage Current(MAX)	$I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I= Leakage Current (µA) V= Rated Voltage (V) C= Rated Capacitance (µF)																							
Dissipation Factor(MAX) (tan δ)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>200~250</th> <th>400~450</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.55</td> <td>0.50</td> <td>0.45</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> </tr> </tbody> </table> (20°C, 120Hz)		Rated Voltage (V)	10	16	25	35	50	63	80	100	200~250	400~450	tan δ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.20	0.20
Rated Voltage (V)	10	16	25	35	50	63	80	100	200~250	400~450														
tan δ	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.20	0.20														
Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>10~100</th> <th>200~250</th> <th>400~450</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C) / Z(20°C)</td> <td>3</td> <td>3</td> <td>8</td> </tr> <tr> <td>Z(-40°C) / Z(20°C)</td> <td>12</td> <td>—</td> <td>—</td> </tr> </tbody> </table> (120Hz)		Rated Voltage (V)	10~100	200~250	400~450	Z(-25°C) / Z(20°C)	3	3	8	Z(-40°C) / Z(20°C)	12	—	—										
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Z(-25°C) / Z(20°C)	3	3	8																					
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Endurance	After applying rated voltage with rated ripple current for 5000hrs at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±20%(For 10WV ; ±25%)of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table>		Capacitance Change	Within ±20%(For 10WV ; ±25%)of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.																
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◆ **MULTIPLIER FOR RIPPLE CURRENT**

Frequency coefficient

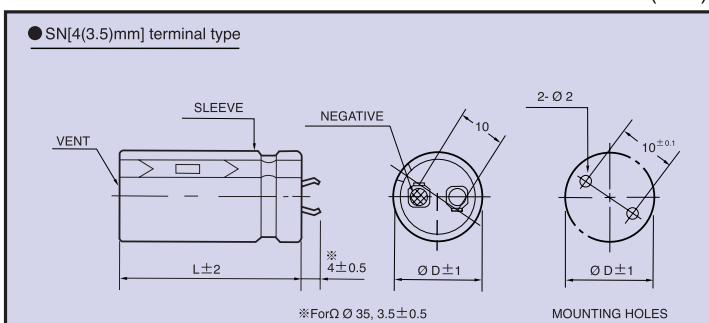
Frequency (Hz)	60(50)	120	500	1k	10k ≤
10 ~ 100WV	0.90	1.00	1.05	1.10	1.15
200 ~ 250WV	0.80	1.00	1.20	1.30	1.50
400 ~ 450WV	0.80	1.00	1.20	1.25	1.40

◆ **PART NUMBER**

 VXG EFC SN D×L
 Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆ **DIMENSIONS**

(mm)





◆ STANDARD SIZE, RATED RIPPLE CURRENT

Cap (μ F)	WV \varnothing D	10				16			
		\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35	\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35
5600						22×25: 1.44			
6800						22×30: 1.66			
8200	22×25: 1.36					22×30: 1.79	25×25: 1.67		
10000	22×30: 1.65					22×35: 2.08	25×30: 2.07		
12000	22×35: 1.85	25×25: 1.82				22×40: 2.36	25×35: 2.37	30×25: 2.13	
15000	22×40: 2.12	25×30: 2.11	30×25: 2.14			22×45: 2.69	25×40: 2.72	30×30: 2.54	
18000	22×45: 2.40	25×35: 2.32	30×30: 2.37				25×45: 3.06	30×35: 3.02	35×30: 3.09
22000		25×40: 2.59	30×30: 2.73				25×50: 3.39	30×40: 3.46	35×30: 3.31
27000		25×45: 3.01	30×35: 3.13	35×30: 3.05				30×45: 3.88	35×35: 3.85
33000		25×50: 3.43	30×40: 3.53	35×35: 3.49				30×50: 4.33	35×40: 4.33
39000			30×45: 3.78	35×40: 3.96					35×45: 4.96
47000			30×50: 4.58	35×45: 4.60					35×50: 5.49
56000				35×50: 5.06					

Cap (μ F)	WV \varnothing D	25				35			
		\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35	\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35
2700						22×25: 1.29			
3300						22×30: 1.54			
3900	22×25: 1.31					22×35: 1.77	25×25: 1.55		
4700	22×30: 1.55					22×40: 2.01	25×30: 1.87		
5600	22×35: 1.77	25×25: 1.56				22×45: 2.25	25×35: 2.18	30×25: 1.80	
6800	22×40: 2.02	25×30: 1.88				22×50: 2.49	25×40: 2.45	30×30: 2.28	
8200	22×45: 2.27	25×35: 2.18	30×25: 1.92				25×45: 2.80	30×35: 2.69	
10000	22×50: 2.56	25×40: 2.53	30×30: 2.38					30×40: 3.04	35×30: 2.78
12000		25×45: 2.79	30×35: 2.70	35×30: 2.76				30×45: 3.38	35×35: 3.30
15000			30×40: 3.13	35×30: 3.00					35×40: 3.88
18000			30×45: 3.52	35×35: 3.50					35×45: 4.40
22000			30×50: 3.92	35×40: 3.95					
27000				35×50: 4.72					

Cap (μ F)	WV \varnothing D	50				63			
		\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35	\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35
1000						22×25: 1.10			
1200						22×25: 1.17			
1500	22×25: 1.21					22×30: 1.41	25×25: 1.38		
1800	22×25: 1.28					22×35: 1.62	25×30: 1.63		
2200	22×30: 1.52	25×25: 1.46				22×40: 1.85	25×30: 1.75	30×25: 1.66	
2700	22×35: 1.77	25×30: 1.76				22×45: 2.10	25×35: 2.03	30×30: 2.01	
3300	22×40: 2.02	25×30: 1.87	30×25: 1.72				25×40: 2.33	30×30: 2.15	
3900	22×45: 2.27	25×35: 2.20	30×30: 2.09				25×45: 2.58	30×35: 2.46	35×30: 2.31
4700		25×40: 2.43	30×30: 2.22					30×40: 2.82	35×35: 2.77
5600		25×45: 2.72	30×35: 2.58	35×30: 2.35				30×45: 3.22	35×40: 3.20
6800			30×40: 3.01	35×35: 2.91					35×45: 3.61
8200			30×50: 3.63	35×40: 3.36					35×50: 3.94
10000				35×45: 3.79					
12000				35×50: 4.06					

Cap (μ F)	WV \varnothing D	80				100			
		\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35	\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35
560						22×25: 1.01			
680						22×30: 1.19			
820	22×25: 1.09					22×35: 1.33	25×25: 1.26		
1000	22×30: 1.29					22×40: 1.56	25×30: 1.52	30×25: 1.47	
1200	22×35: 1.48	25×25: 1.32				22×45: 1.76	25×35: 1.76	30×30: 1.76	
1500	22×40: 1.70	25×30: 1.74	30×25: 1.58			22×50: 2.00	25×40: 2.03	30×30: 1.89	
1800	22×45: 1.91	25×35: 1.86	30×25: 1.68				25×45: 2.29	30×35: 2.19	35×30: 2.05
2200		25×45: 2.22	30×30: 2.02					30×40: 2.52	35×35: 2.48
2700			30×35: 2.50	35×30: 2.18				30×45: 2.86	35×40: 2.87
3300			30×40: 2.69	35×35: 2.60					35×45: 3.25
3900			30×45: 2.94	35×40: 3.00					35×50: 3.56
4700				35×45: 3.44					
5600				35×50: 3.72					

↑ Ripple Current (A r.m.s./120Hz, 105°C)
 ↑ Case Size \varnothing D × L (mm)



◆ STANDARD SIZE, RATED RIPPLE CURRENT

Cap (μ F)	WV \varnothing D	200				220			
		\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35	\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35
270		22×25: 1.09				22×25: 1.04			
330		22×30: 1.31				22×30: 1.26			
390		22×30: 1.32	25×25: 1.27			22×35: 1.47	25×25: 1.21		
470		22×35: 1.54	25×30: 1.54			22×40: 1.64	25×30: 1.47		
560		22×40: 1.75	25×30: 1.54			22×45: 1.86	25×35: 1.71	30×25: 1.41	
680		22×45: 1.96	25×35: 1.79	30×25: 1.46		22×50: 2.05	25×40: 1.94	30×30: 1.71	35×25: 1.54
820		22×50: 2.15	25×40: 2.03	30×30: 1.77	35×25: 1.59		25×45: 2.16	30×35: 1.99	35×30: 1.89
1000			25×45: 2.26	30×35: 2.06	35×30: 1.93		25×50: 2.37	30×40: 2.26	35×35: 2.15
1200				30×40: 2.34	35×35: 2.22			30×45: 2.51	35×40: 2.48
1500				30×45: 2.60	35×40: 2.56			30×50: 2.75	35×40: 2.50
1800					35×45: 2.85				35×50: 3.04
2200					35×50: 3.14				

Cap (μ F)	WV \varnothing D	250				400			
		\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35	\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35
82						22×25: 0.64			
100						22×30: 0.74			
120						22×30: 0.79	25×25: 0.79		
150						22×35: 0.92	25×30: 0.95		
180						22×40: 1.05	25×35: 1.10	30×25: 0.97	
220		22×25: 0.97				22×50: 1.28	25×35: 1.12	30×30: 1.17	35×25: 1.10
270		22×30: 1.18					25×45: 1.40	30×35: 1.36	35×30: 1.33
330		22×35: 1.37	25×25: 1.14				25×50: 1.55	30×40: 1.55	35×30: 1.35
390		22×40: 1.56	25×30: 1.38					30×45: 1.72	35×35: 1.53
470		22×45: 1.74	25×35: 1.61	30×25: 1.34				30×50: 1.89	35×40: 1.78
560		22×50: 1.92	25×40: 1.83	30×30: 1.63	35×25: 1.48				35×45: 1.98
680			25×45: 2.04	30×35: 1.90	35×30: 1.80				35×50: 2.19
820			25×50: 2.24	30×40: 2.15	35×30: 1.81				
1000				30×45: 2.39	35×35: 2.38				
1200				30×50: 2.62	35×40: 2.39				
1500					35×50: 2.92				

Cap (μ F)	WV \varnothing D	420				450			
		\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35	\varnothing 22	\varnothing 25	\varnothing 30	\varnothing 35
82		22×25: 0.61				22×25: 0.60			
100		22×30: 0.74				22×30: 0.73	25×25: 0.72		
120		22×35: 0.86	25×25: 0.75			22×35: 0.84	25×30: 0.87		
150		22×40: 0.98	25×30: 0.90			22×40: 0.97	25×30: 0.89	30×25: 0.90	
180		22×45: 1.09	25×35: 1.05	30×25: 0.93		22×45: 1.08	25×35: 1.03	30×30: 1.08	
220		22×50: 1.21	25×40: 1.19	30×30: 1.12	35×25: 1.05		25×40: 1.17	30×30: 1.10	35×25: 1.04
270			25×45: 1.34	30×35: 1.30	35×30: 1.27		25×50: 1.43	30×35: 1.28	35×30: 1.25
330				30×40: 1.47	35×35: 1.45			30×45: 1.45	35×35: 1.43
390				30×45: 1.64	35×40: 1.68			30×50: 1.75	35×40: 1.66
470				30×50: 1.81	35×40: 1.71				35×45: 1.85
560					35×50: 2.07				35×50: 2.04

↑ Ripple Current (A r.m.s./120Hz, 105°C)
 ↑ Case Size \varnothing D×L(mm)