

USG SERIES

85°C Miniaturized, Snap-in Terminal Type

◆FEATURES

- Load Life : 85°C 2000 hours.
- Smaller size than USC series.
- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics																
Category Temperature Range	-40~+85°C	-25~+85°C															
Rated Voltage Range	160~250V.DC	400~450V.DC															
Capacitance Tolerance	±20% (20°C, 120Hz)																
Leakage Current(MAX)	$I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) $I=(\mu A)$ Leakage Current $C=(\mu F)$ Rated Capacitance $V=(V)$ Rated Voltage																
(tanδ) Dissipation Factor(MAX)	0.2 (20°C, 120Hz)																
Endurance	After applying rated voltage with rated ripple current for 2000 hours at 85°C, the capacitors shall meet the following requirements. <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance Change</td> <td>Within ±20% 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> </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.									
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Low Temperature Stability Impedance Ration(MAX)	<table border="1" style="margin-left: 20px;"> <tr> <td>Rated Voltage</td> <td>160~250</td> <td>400</td> <td>420~450</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>8</td> <td>12</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>-</td> <td>-</td> <td></td> </tr> </table>		Rated Voltage	160~250	400	420~450	(120Hz)	Z(-25°C)/Z(20°C)	4	8	12		Z(-40°C)/Z(20°C)	12	-	-	
Rated Voltage	160~250	400	420~450	(120Hz)													
Z(-25°C)/Z(20°C)	4	8	12														
Z(-40°C)/Z(20°C)	12	-	-														

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

(Hz) Frequency	60(50)	120	500	1k	10k≤
160~250WV	0.80	1.00	1.20	1.30	1.50
400~450WV	0.80	1.00	1.20	1.25	1.40

◆OPTION

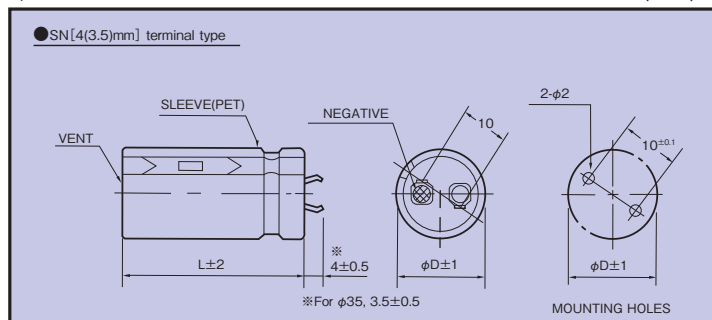
	Code
PET Sleeve without plate	EFC

◆PART NUMBER

□□□ / **USG** / □□□□□ / **M** / □□□ / **SN** / **DXL**
 Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆DIMENSIONS

(mm)



◆ STANDARD SIZE

Cap (μ F)	WV ϕ D	160					180				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
390		20x25; 1.19					20x25; 1.84				
470		20x30; 1.76	22x25; 1.76				20x30; 2.08	22x25; 2.08			
560		20x30; 2.25	22x25; 2.25				20x35; 2.25	22x30; 2.25			
680		20x35; 2.50	22x30; 2.50	25x25; 2.50			20x40; 2.50	22x35; 2.50	25x25; 2.50		
820		20x40; 2.75	22x35; 2.75	25x30; 2.75			20x45; 2.75	22x40; 2.75	25x30; 2.75		
1000			22x40; 3.00	25x30; 3.00	30x25; 3.00			22x45; 3.00	25x35; 3.00	30x25; 3.00	
1200			22x45; 3.25	25x35; 3.25	30x30; 3.25			22x50; 3.31	25x40; 3.31	30x30; 3.31	35x25; 3.31
1500				25x45; 3.73	30x35; 3.73				25x50; 3.83	30x35; 3.83	35x30; 3.83
1800				25x50; 4.20	30x35; 4.20	35x30; 4.20				30x40; 4.32	35x35; 4.32
2200					30x45; 4.78	35x35; 4.78				30x50; 4.92	35x40; 4.92
2700					30x50; 5.45	35x40; 5.45					35x45; 5.52
3300						35x45; 5.75					

Cap (μ F)	WV ϕ D	200					220				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
270							20x25; 1.42				
330		20x25; 1.44					20x30; 1.58	22x25; 1.58			
390		20x30; 1.68	22x25; 1.68				20x35; 1.75	22x30; 1.75			
470		20x35; 1.93	22x30; 1.93	25x25; 1.93			20x35; 1.99	22x30; 1.99	25x25; 1.99		
560		20x35; 2.43	22x30; 2.43	25x25; 2.43			20x40; 2.28	22x35; 2.28	25x30; 2.28		
680		20x40; 2.68	22x35; 2.68	25x30; 2.68	30x25; 2.68			22x40; 2.46	25x30; 2.46	30x25; 2.46	
820			22x40; 2.93	25x30; 2.93	30x25; 2.93			22x45; 2.81	25x35; 2.81	30x30; 2.81	
1000			22x45; 3.25	25x35; 3.25	30x30; 3.25	35x25; 3.25			25x45; 3.29	30x30; 3.29	
1200				25x45; 3.50	30x35; 3.50	35x30; 3.50			25x50; 3.60	30x35; 3.60	35x30; 3.60
1500				25x50; 3.87	30x40; 3.87	35x30; 3.87				30x45; 3.92	35x35; 3.92
1800					30x45; 4.32	35x35; 4.32				30x50; 4.30	35x40; 4.30
2200					30x50; 4.92	35x40; 4.92					35x50; 4.95
2700						35x50; 5.45					

Cap (μ F)	WV ϕ D	250					400				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
82							20x25; 0.80				
100							20x30; 0.94	22x25; 0.94			
120							20x30; 1.08	22x25; 1.08			
150							20x35; 1.21	22x30; 1.21	25x25; 1.21		
180							20x40; 1.45	22x35; 1.45	25x25; 1.45		
220		20x25; 1.23						22x40; 1.58	25x30; 1.58	30x25; 1.58	
270		20x30; 1.31	22x25; 1.31					22x45; 1.67	25x35; 1.67	30x25; 1.67	
330		20x30; 1.75	22x25; 1.75					22x50; 1.90	25x40; 1.90	30x30; 1.90	35x25; 1.90
390		20x35; 1.91	22x30; 1.91	25x25; 1.91					25x45; 2.13	30x35; 2.13	35x30; 2.13
470		20x40; 2.11	22x35; 2.11	25x25; 2.11					25x50; 2.39	30x40; 2.39	35x30; 2.39
560			22x40; 2.25	25x30; 2.25	30x25; 2.25					30x45; 2.69	35x35; 2.69
680			22x45; 2.50	25x35; 2.50	30x30; 2.50						35x40; 2.96
820				25x40; 2.77	30x30; 2.77	35x25; 2.77					35x50; 3.25
1000				25x45; 3.32	30x35; 3.32	35x30; 3.32					
1200					30x40; 3.84	35x35; 3.84					
1500					30x50; 4.25	35x40; 4.25					
1800						35x45; 4.55					

Cap (μ F)	WV ϕ D	420					450				
		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
68							20x25; 0.66				
82		20x25; 0.83					20x25; 0.83				
100		20x30; 0.97	22x25; 0.97				20x30; 0.93	22x25; 0.93			
120		20x30; 1.08	22x25; 1.08				20x35; 1.04	22x30; 1.04	25x25; 1.04		
150		20x35; 1.30	22x30; 1.30	25x25; 1.30			20x40; 1.29	22x35; 1.29	25x25; 1.29		
180		20x40; 1.48	22x35; 1.48	25x30; 1.48				22x40; 1.40	25x30; 1.40	30x25; 1.40	
220			22x40; 1.65	25x35; 1.65	30x25; 1.65			22x45; 1.66	25x35; 1.66	30x25; 1.66	
270			22x50; 1.94	25x35; 1.94	30x30; 1.94			22x50; 1.81	25x40; 1.81	30x30; 1.81	35x25; 1.81
330				25x45; 2.17	30x35; 2.17	35x30; 2.17			25x45; 2.10	30x35; 2.10	35x30; 2.10
390				25x50; 2.27	30x35; 2.27	35x30; 2.27				30x40; 2.32	35x35; 2.32
470					30x40; 2.61	35x35; 2.61				30x45; 2.66	35x40; 2.66
560					30x50; 2.82	35x40; 2.82					35x40; 2.82
680						35x45; 3.11					35x50; 3.00

↑ Ripple Current (A r.m.s./120Hz, 85°C)
Case Size ϕ D×L(mm)