

USG 系列
SERIES

基板自立型85°C小型品
85°C Miniaturized, Snap-in Terminal Type

◆ 特 长 / FEATURES

- 85°C、2000小时品。
Load Life : 85°C 2000 hours.
- 将以往的USC系列进一步小型化。
Smaller size than USC series.
- RoHS指令对应品。
RoHS compliance.



◆ 规格表 / SPECIFICATIONS

项 目 Items	特 性 Characteristics	
工作温度范围 Category Temperature Range	-40~+85°C	-25~+85°C
额定电压范围 Rated Voltage Range	160~250V.DC	400~450V.DC
静电容量允许差 Capacitance Tolerance	±20% (20°C, 120Hz)	
漏 电 流 Leakage Current(MAX)	$I = 3\sqrt{CV}$ (施加额定电压5分钟后) $I = 3\sqrt{CV}$ (After 5 minutes application of rated voltage) I = 漏电流 (µA) C = 额定静电容量 (µF) V = 额定电压 (V) Leakage Current Rated Capacitance Rated Voltage	
损失角正切值(tan δ) Dissipation Factor(MAX)	0.2 (20°C, 120Hz)	
耐 久 性 Endurance	在85°C环境中，不超过额定电压的范围内叠加额定纹波电流，连续加载2000小时后，满足以下各项要求。 After applying rated voltage with rated ripple current for 2000 hours at 85°C, the capacitors shall meet the following requirements.	
	静电容量变化率 Capacitance Change	初期值的±20%以内 Within ±20% of the initial value.
	损 失 角 正 切 值 Dissipation Factor	规格值的200%以下 Not more than 200% of the specified value.
低 温 特 性 Low Temperature Stability (阻抗比) Impedance Ratio (MAX)	额定电压(V) Rated Voltage	160~250 400 420~450 (120Hz)
	Z(-25°C)/Z(20°C)	4 8 12
	Z(-40°C)/Z(20°C)	12 - -

◆ 纹波电流修正系数 / MULTIPLIER FOR RIPPLE CURRENT

频率系数 / Frequency Coefficient

频率 (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

◆ 副记号 / OPTION

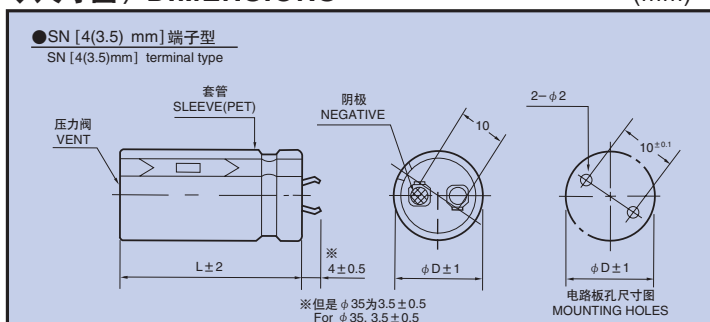
副记号	记号 Code
PET套管, 无底板 PET Sleeve without plate	EFC

◆ 产品型号体系 / PART NUMBER

□□□	USG	□□□□□	M	□□□	SN	D×L
额定电压 Rated Voltage	系列名称 Series	额定静电容量 Rated Capacitance	静电容量允许差 Capacitance Tolerance	副记号 Option	端子记号 Terminal Code	铝壳尺寸 Case Size

◆ 尺寸图 / DIMENSIONS

(mm)



◆标准品一览表/STANDARD SIZE

Cap (μ F)	WV		160					180				
	ϕ D		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
390			20×25; 1.19					20×25; 1.84				
470			20×30; 1.76	22×25; 1.76				20×30; 2.08	22×25; 2.08			
560			20×30; 2.25	22×25; 2.25				20×35; 2.25	22×30; 2.25			
680			20×35; 2.50	22×30; 2.50	25×25; 2.50			20×40; 2.50	22×35; 2.50	25×25; 2.50		
820			20×40; 2.75	22×35; 2.75	25×30; 2.75			20×45; 2.75	22×40; 2.75	25×30; 2.75		
1000				22×40; 3.00	25×30; 3.00	30×25; 3.00			22×45; 3.00	25×35; 3.00	30×25; 3.00	
1200				22×45; 3.25	25×35; 3.25	30×30; 3.25			22×50; 3.31	25×40; 3.31	30×30; 3.31	35×25; 3.31
1500					25×45; 3.73	30×35; 3.73				25×50; 3.83	30×35; 3.83	35×30; 3.83
1800					25×50; 4.20	30×35; 4.20	35×30; 4.20				30×40; 4.32	35×35; 4.32
2200						30×45; 4.78	35×35; 4.78				30×50; 4.92	35×40; 4.92
2700						30×50; 5.45	35×40; 5.45					35×45; 5.52
3300							35×45; 5.75					

Cap (μ F)	WV		200					220				
	ϕ D		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
270								20×25; 1.42				
330			20×25; 1.44					20×30; 1.58	22×25; 1.58			
390			20×30; 1.68	22×25; 1.68				20×35; 1.75	22×30; 1.75			
470			20×35; 1.93	22×30; 1.93	25×25; 1.93			20×35; 1.99	22×30; 1.99	25×25; 1.99		
560			20×35; 2.43	22×30; 2.43	25×25; 2.43			20×40; 2.28	22×35; 2.28	25×30; 2.28		
680			20×40; 2.68	22×35; 2.68	25×30; 2.68	30×25; 2.68			22×40; 2.46	25×30; 2.46	30×25; 2.46	
820				22×40; 2.93	25×30; 2.93	30×25; 2.93			22×45; 2.81	25×35; 2.81	30×30; 2.81	
1000				22×45; 3.25	25×35; 3.25	30×30; 3.25	35×25; 3.25			25×45; 3.29	30×30; 3.29	
1200					25×45; 3.50	30×35; 3.50	35×30; 3.50			25×50; 3.60	30×35; 3.60	35×30; 3.60
1500					25×50; 3.87	30×40; 3.87	35×30; 3.87				30×45; 3.92	35×35; 3.92
1800						30×45; 4.32	35×35; 4.32				30×50; 4.30	35×40; 4.30
2200						30×50; 4.92	35×40; 4.92					35×50; 4.95
2700							35×50; 5.45					

Cap (μ F)	WV		250					400				
	ϕ D		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
82								20×25; 0.80				
100								20×30; 0.94	22×25; 0.94			
120								20×30; 1.08	22×25; 1.08			
150								20×35; 1.21	22×30; 1.21	25×25; 1.21		
180								20×40; 1.45	22×35; 1.45	25×25; 1.45		
220			20×25; 1.23						22×40; 1.58	25×30; 1.58	30×25; 1.58	
270			20×30; 1.31	22×25; 1.31					22×45; 1.67	25×35; 1.67	30×25; 1.67	
330			20×30; 1.75	22×25; 1.75					22×50; 1.90	25×40; 1.90	30×30; 1.90	35×25; 1.90
390			20×35; 1.91	22×30; 1.91	25×25; 1.91					25×45; 2.13	30×35; 2.13	35×30; 2.13
470			20×40; 2.11	22×35; 2.11	25×25; 2.11					25×50; 2.39	30×40; 2.39	35×30; 2.39
560				22×40; 2.25	25×30; 2.25	30×25; 2.25					30×45; 2.69	35×35; 2.69
680				22×45; 2.50	25×35; 2.50	30×30; 2.50						35×40; 2.96
820					25×40; 2.77	30×30; 2.77	35×25; 2.77					35×50; 3.25
1000					25×45; 3.32	30×35; 3.32	35×30; 3.32					
1200						30×40; 3.84	35×35; 3.84					
1500						30×50; 4.25	35×40; 4.25					
1800							35×45; 4.55					

Cap (μ F)	WV		420					450				
	ϕ D		ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35	ϕ 20	ϕ 22	ϕ 25	ϕ 30	ϕ 35
68								20×25; 0.66				
82			20×25; 0.83					20×25; 0.83				
100			20×30; 0.97	22×25; 0.97				20×30; 0.93	22×25; 0.93			
120			20×30; 1.08	22×25; 1.08				20×35; 1.04	22×30; 1.04	25×25; 1.04		
150			20×35; 1.30	22×30; 1.30	25×25; 1.30			20×40; 1.29	22×35; 1.29	25×25; 1.29		
180			20×40; 1.48	22×35; 1.48	25×30; 1.48				22×40; 1.40	25×30; 1.40	30×25; 1.40	
220				22×40; 1.65	25×35; 1.65	30×25; 1.65			22×45; 1.66	25×35; 1.66	30×25; 1.66	
270				22×50; 1.94	25×35; 1.94	30×30; 1.94			22×50; 1.81	25×40; 1.81	30×30; 1.81	35×25; 1.81
330					25×45; 2.17	30×35; 2.17	35×30; 2.17			25×45; 2.10	30×35; 2.10	35×30; 2.10
390					25×50; 2.27	30×35; 2.27	35×30; 2.27				30×40; 2.32	35×35; 2.32
470						30×40; 2.61	35×35; 2.61				30×45; 2.66	35×40; 2.66
560						30×50; 2.82	35×40; 2.82					35×40; 2.82
680							35×45; 3.11					35×50; 3.00

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