

## GKS Snap-in Type, 85°C Standard

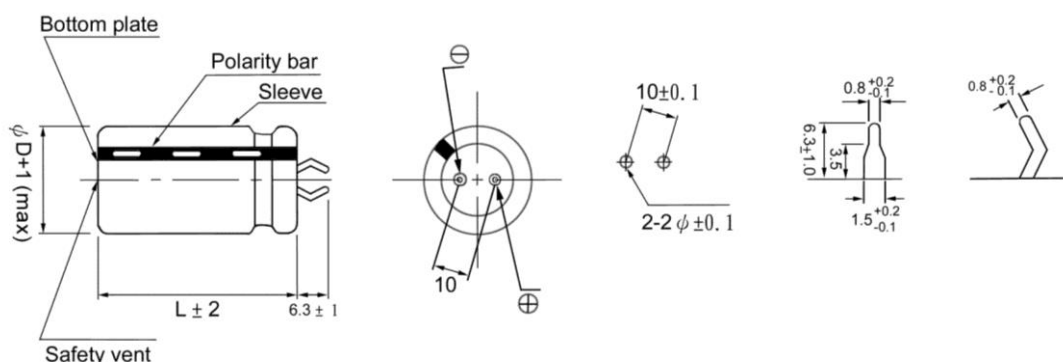


- Rated voltage range : 16 ~ 450V
- Capacitance range : 56 ~ 56,000 $\mu$ F
- Life guaranteed 2,000 hours/85°C
- Suitable for general power unit application
- RoHS compliant/Non-solvent proof type

### Specifications

Item	Performance Characteristics										
Operating Temperature range	-40 + 85°C (16~250V), -25 + 85°C (350~450V)										
Rated Voltage Range	16V ~ 450V										
Capacitance Range	56 ~ 56,000 $\mu$ F										
Capacitance Tolerance	$\pm 20\%$ / M (120Hz, 20°C)										
Leakage Current	$I \leq 3 \sqrt{CV}$ after 5 minutes application of rated voltage. C: Capacitance ( $\mu$ F), V: Working voltage (v)										
Dissipation Factor (120 Hz, 20°C)	Rated voltage (V)	16	25	35	50	63	80-100	160-250	350-450	120 Hz, 20°C	
	Tan $\delta$ (max.)	0.50	0.40	0.35	0.30	0.25	0.20	0.15	0.20		
Low Temperature Characteristics (120 Hz)	Impedance Ratio / Stability at Low Temperature										
	Rated voltage (V)	16 ~ 100			160 ~ 250			350 ~ 450			
	Z (-25°C) / Z (20°C)	4			3			8			
	Z (-40°C) / Z (20°C)	15			12			-			
Load Life	After 2,000 hours application of WV & rated ripple current at 85°C, the tested capacitor shall meet the characteristics requirement mentioned below.										
	Capacitance change	Within $\pm 20\%$ of initial value									
	Tan $\delta$	200% or less of initial specified value									
	Leakage current	Initial specified value or less									
Shelf Life	After stored at 85°C, no voltage applied for 1,000 hours, the capacitor shall meet the characteristics requirement below.										
	Capacitance change	Within $\pm 15\%$ of initial value									
	Tan $\delta$	150% or less of initial specified value									
	Leakage current	Initial specified value or less									

### Dimension (mm)



### Frequency coefficient of allowable ripple current

Frequency (Hz)	50/60	120	300	1K	10K	50K
16 ~ 50V	0.95	1.00	1.03	1.05	1.08	1.08
63 ~ 100V	0.95	1.00	1.07	1.13	1.19	1.20
160 ~ 250V	0.81	1.00	1.17	1.32	1.45	1.50
350 ~ 450V	0.77	1.00	1.16	1.30	1.41	1.43

• Standard Products Table

WV. DC Cap.( $\mu$ F)	16V		25V		35V	
	Size (D x L mm)	Ripple current Arms/85° 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz
3900					22 x 25	2.16
4700					22 x 30	2.42
4700					25 x 25	2.42
5600			22 x 25	2.11	22 x 35	2.66
6800			22 x 30	2.47	22 x 40	2.97
6800			25 x 25	2.47	25 x 30	2.82
8200	22 x 25	2.55	22 x 35	2.86	22 x 45	3.29
8200					25 x 35	3.17
10000	22 x 30	2.89	22 x 40	3.31	22 x 50	3.75
10000			25 x 30	3.15	25 x 40	3.65
12000	22 x 30	3.01	22 x 45	3.77	25 x 45	4.15
12000	25 x 25	3.01	25 x 35	3.63	30 x 35	4.14
15000	22 x 35	3.45	22 x 50	4.21	30 x 40	4.77
15000	25 x 30	3.48	25 x 40	4.10	35 x 35	4.95
18000	22 x 40	3.84	25 x 45	4.53	30 x 45	5.30
18000	25 x 35	3.91	30 x 35	4.52	35 x 40	5.52
22000	22 x 50	4.52	30 x 45	5.33	35 x 45	6.20
22000	25 x 40	4.40	35 x 35	5.26		
27000	25 x 45	4.96	30 x 50	5.96	35 x 50	6.89
27000	30 x 35	4.95	35 x 40	5.93		
33000	30 x 40	5.60	35 x 45	6.65		
39000	30 x 45	6.21	35 x 50	7.31		
47000	35 x 40	6.89				
56000	35 x 45	7.69				

WV. DC Cap.( $\mu$ F)	50V		63V		80V	
	Size (D x L mm)	Ripple current Arms/85° 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz
1200					22 x 25	1.66
1500					22 x 30	1.96
1800			22 x 25	1.82	22 x 30	2.11
1800					25 x 25	2.11
2200			22 x 30	2.14	22 x 35	2.44
2200			25 x 25	2.14	25 x 30	2.46
2700			22 x 35	2.49	22 x 40	2.82
2700			25 x 30	2.52	25 x 35	2.86
3300	22 x 30	2.35	22 x 35	2.72	22 x 45	3.23
3300	25 x 25	2.35	25 x 30	2.74	25 x 40	3.29
3900	22 x 35	2.66	22 x 40	3.09	22 x 50	3.62
3900	25 x 30	2.68	25 x 35	3.13	25 x 45	3.71
4700	22 x 40	3.02	22 x 50	3.69	25 x 50	4.20
4700	25 x 35	3.07	25 x 40	3.59	30 x 40	4.23
5600	22 x 45	3.40	25 x 45	4.01	30 x 45	4.70
5600	25 x 40	3.47	30 x 35	4.00	35 x 35	4.64
6800	22 x 50	3.84	25 x 50	4.52	30 x 50	5.27
6800	25 x 40	3.74	30 x 40	4.55	35 x 40	5.24
8200	25 x 50	4.44	30 x 45	5.12	35 x 45	5.89
8200	30 x 40	4.47	35 x 35	5.05		
10000	30 x 45	5.08	30 x 50	5.78	35 x 50	6.63
10000	35 x 35	5.01	35 x 40	5.75		
12000	30 x 50	5.72	35 x 45	6.47		
15000	35 x 45	6.56				
18000	35 x 50	7.14				

• Standard Products Table

WV. DC Cap.( $\mu$ F)	100V		160V		180V	
	Size (D x L mm)	Ripple current Arms/85° 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz
330					22 x 25	1.35
390			22 x 25	1.55	22 x 30	1.55
470			22 x 30	1.75	22 x 35	1.75
470			25 x 25	1.75	25 x 25	1.75
560			22 x 35	1.90	22 x 40	2.00
560			25 x 30	1.90	25 x 30	2.00
680			22 x 40	2.15	22 x 45	2.25
680			25 x 30	2.15	25 x 35	2.25
820			22 x 45	2.45	22 x 50	2.50
820			25 x 35	2.45	25 x 40	2.50
1000			22 x 50	2.80	25 x 45	2.85
1000			25 x 40	2.80	30 x 35	2.85
1200	22 x 30	2.11	25 x 45	3.25	25 x 50	3.30
1200	25 x 25	2.11	30 x 35	3.25	30 x 40	3.30
1500	22 x 35	2.45	30 x 40	3.75	30 x 45	3.75
1500	25 x 30	2.47	35 x 35	3.75	35 x 35	3.75
1800	22 x 40	2.77	30 x 50	4.00	35 x 45	4.05
1800	25 x 35	2.81	35 x 40	4.00		
2200	22 x 45	3.15	35 x 45	4.50	35 x 50	4.60
2200	25 x 40	3.21				
2700	25 x 45	3.66	35 x 50	5.15		
3300	25 x 50	4.15				
3300	30 x 40	4.18				
3900	30 x 45	4.67				
3900	35 x 35	4.61				
4700	30 x 50	5.26				
4700	35 x 40	5.23				
5600	35 x 45	5.88				

WV. DC Cap.( $\mu$ F)	200V		250V		350V	
	Size (D x L mm)	Ripple current Arms/85° 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz
100					22 x 25	0.86
120					22 x 30	0.99
120					25 x 25	0.99
150					22 x 35	1.14
150					25 x 25	1.10
180					22 x 40	1.28
180					25 x 30	1.24
220			22 x 25	1.15	25 x 45	1.44
270	22 x 25	1.25	22 x 30	1.25	22 x 50	1.64
270			25 x 25	1.25	25 x 40	1.63
330	22 x 30	1.40	22 x 35	1.45	25 x 50	1.88
330			25 x 30	1.45	30 x 35	1.83
390	22 x 30	1.60	22 x 40	1.70	30 x 40	2.06
390	25 x 25	1.60	25 x 30	1.70	35 x 30	2.03
470	22 x 35	1.80	22 x 45	1.90	30 x 50	2.40
470	25 x 30	1.80	25 x 35	1.90	35 x 35	2.33
560	22 x 40	2.00	22 x 50	2.15	35 x 40	2.60
560	25 x 35	2.00	25 x 40	2.15		
680	22 x 45	2.30	25 x 45	2.35	35 x 45	2.96
680	25 x 40	2.25	30 x 35	2.35		
820	22 x 50	2.50	30 x 40	2.75		
820	25 x 45	2.50	35 x 35	2.75		
1000	30 x 40	2.95	30 x 45	3.00		
1000	35 x 30	2.95	35 x 40	3.00		
1200	30 x 45	3.40	35 x 45	3.50		
1500	35 x 40	3.80	35 x 50	4.00		
1800	35 x 45	4.15				
2200	35 x 50	4.70				

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WV. DC Cap.( $\mu$ F)	400V		450V	
	Size (D x L mm)	Ripple current Arms/85° 120 Hz	Size (D x L mm)	Ripple current Arms/85°C, 120 Hz
56			22 x 25	0.59
68			22 x 30	0.63
82	22 x 25	0.72	22 x 30	0.78
82			25 x 25	0.78
100	22 x 30	0.77	22 x 35	0.92
100			25 x 30	0.92
120	22 x 30	0.94	22 x 40	1.06
120	25 x 25	0.94	25 x 35	1.08
150	22 x 35	1.13	22 x 50	1.28
150	25 x 30	0.92	25 x 40	1.25
180	22 x 40	1.27	25 x 45	1.41
180	25 x 35	1.06	30 x 40	1.48
220	22 x 45	1.45	25 x 50	1.59
220	25 x 40	1.22	30 x 40	1.60
220	30 x 30	1.46	35 x 30	1.57
270	25 x 45	1.69	30 x 45	1.83
270	30 x 35	1.68	35 x 35	1.80
330	25 x 50	1.92	30 x 50	2.08
330	30 x 40	1.93	35 x 40	2.06
390	30 x 45	2.16	35 x 45	2.31
390	35 x 35	2.13		
470	30 x 50	2.43	35 x 50	2.47
470	35 x 40	2.42		
560	35 x 45	2.72		
680	35 x 50	3.08		