

GHS Snap-In Type, 105°C Standard Series

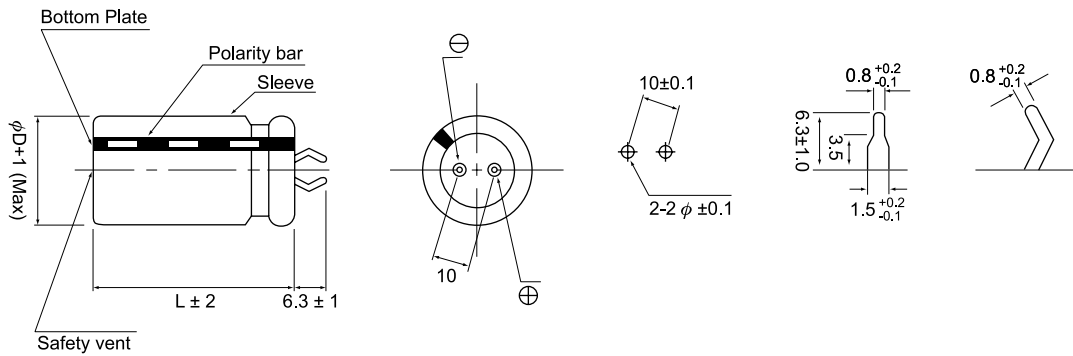
- Snap-In terminal & variety sizes for option.
- Working temperature range up to 105°C for power supply application.
- Life guaranteed 2,000hours/105°C.



• Specifications

Item	Performance Characteristics										
Operating Temperature range	-40 + 105°C					-25 + 105°C					
Rated Voltage	16V ~ 250V					350V ~ 450V					
Capacitance Range	56 ~ 47,000 μF										
Capacitance Tolerance	±20% (120Hz, 20°C)										
Leakage Current	I ≤ 0.02CV or 3 mA whichever is smaller after 5 minutes application of rated voltage.										
Dissipation Factor (120Hz, 20°C)	Rated voltage (V)	16	25	35	50	63	80	100	160~250	350~450	
	Tan δ (max.)	0.50	0.40	0.35	0.30	0.25	0.20	0.20	0.15	0.25	
Temperature Characteristics (120Hz)	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 at 105°C, capacitor shall meet the characteristics requirements mentioned below.										
	Capacitance change	Within ±20% of initial value									
	Tan δ	200% or less of initial specified value									
	Leakage current	Initial specified value or less									
Shelf Life	At 105°C, no voltage applied for 1,000 hours, the capacitor shall meet the limits as in load life.										

• Dimension (mm)



• Frequency coefficient of allowable ripple current

WV \ Frequency	50Hz	60Hz	120Hz	1KHz	10KHz~
16 ~ 100V	0.88	0.90	1.00	1.15	1.15
160 ~ 250V	0.85	0.88	1.00	1.15	1.20
400 ~ 450V	0.88	0.90	1.00	1.10	1.15

• Standard Products Table

Dφ x L (mm)

Cap (μF)	16V				25V			35V			50V			
2700											22x30	25x25		
											1.70	1.70		
3300								22x25			22x35	25x30		
								1.43			1.98	2.00		
3900								22x30			22x40	25x35	30x25	
								1.65			2.25	2.28	2.22	
4700					22x25			22x35	25x25		22x45	25x40	30x30	
					1.55			1.89	1.78		2.56	2.61	2.58	
5600					22x30			22x35	25x30	30x25	22x50	25x40	30x35	
					1.76			2.02	2.04	2.12	2.89	2.81	2.95	
6800	22x25				22x30	25x25		22x40	25x35		25x50	30x40	35x30	
	1.60				1.91	1.91		2.28	2.31		3.37	3.39	3.31	
8200	22x30				22x35	25x30	30x25	22x50	25x40	30x30		30x45	35x35	
	1.85				2.14	2.16	2.25	2.67	2.60	2.56		3.71	3.66	
10000	22x30	25x25			22x40	25x35			25x45	30x35		30x50	35x40	
	1.99	1.99			2.40	2.44			2.92	2.92		4.09	4.07	
12000	22x35	25x30	30x25		22x45	25x40	30x30		25x50	30x40	35x30		35x45	
	2.28	2.30	2.38		2.69	2.74	2.70		3.26	3.28	3.20		4.50	
15000	22x40	25x35				25x45	30x35	35x30			30x45	35x35		
	2.64	2.68				3.15	3.13	3.22			3.74	3.69		
18000	22x45	25x40	30x30			25x50	30x40					35x40		
	2.98	3.04	3.00			3.54	3.54					4.16		
22000		25x45	30x35				30x45	35x35				35x50		
		3.40	3.39				4.24	3.96				4.92		
27000		25x50	30x40	35x30				35x45						
		3.81	3.83	3.74				4.75						
33000			30x45	35x35				35x50						
			4.30	4.24				5.39						
39000			30x50	35x40										
			4.74	4.72										
47000				35x45										
				5.27										

Cap (μF)	63V				80V			100V				
1000					22x30	25x25		22x35	25x30			
					1.29	1.29		1.54	1.56			
1200	22x25				22x30	25x25		22x40	25x35	30x25		
	1.25				1.39	1.39		1.74	1.76	1.71		
1500	22x30	25x25			22x35	25x30		22x45	25x40	30x30		
	1.44	1.44			1.61	1.62		1.99	2.03	2.00		
1800	22x30	25x25			22x40	25x35	30x25		25x45	30x35		
	1.52	1.52			1.83	1.86	1.81		2.28	2.27		
2200	22x35	25x30			22x45	25x35	30x30		25x50	30x40	35x30	
	1.73	1.75			2.09	2.01	2.10		2.57	2.59	2.52	
2700	22x40	25x35	30x25			25x45	30x35			30x45	35x35	
	1.97	1.99	1.93			2.43	2.43			2.94	2.90	
3300	22x50	25x40	30x30			25x50	30x40	35x30		30x50	35x40	
	2.32	2.27	2.24			2.76	2.78	2.71		3.32	3.31	
3900		25x45	30x35				30x45	35x35			35x45	
		2.54	2.55				3.12	3.07			3.69	
4700		25x50	30x40	35x30			30x50	35x40			35x50	
		2.88	2.90	2.83			3.52	3.50			4.14	
5600			30x45	35x35				35x45				
			3.28	3.24				3.87				
6800			30x50	35x40				35x50				
			3.73	3.71				4.19				
8200				35x45								
				4.16								
10000				35x50								
				4.69								

Case size
Allowable ripple

Allowable ripple current (A) at 105°C 120Hz

• Standard Products Table

Dφ x L (mm)

Cap (μF)	WV	160V				180V				200V				250V				
150															22x25			
															0.65			
180															22x25			
															0.75			
220															22x30	25x25		
															0.85	0.85		
270		22x25				22x25				22x25					22x35	25x30	30x25	
		0.90				0.90				0.90					1.00	1.00	1.00	
330		25x25				22x30				22x30	25x25				22x40	25x30	30x25	
		1.00				1.05				1.05	1.05				1.10	1.10	1.10	
390		22x30				22x30	25x25			22x35	25x30				22x45	25x40	30x30	
		1.15				1.20	1.20			1.25	1.25				1.25	1.25	1.25	
470		22x35	25x25			22x35	25x30			22x40	25x30	30x25			22x50	25x40	30x35	35x25
		1.30	1.30			1.30	1.30			1.35	1.35	1.35			1.30	1.30	1.30	1.30
560		22x40	25x30			22x40	25x35	30x25		22x45	25x35	30x30				25x50	30x35	35x30
		1.45	1.45			1.40	1.40	1.40		1.50	1.50	1.50				1.55	1.55	1.55
680		22x45	25x35	30x25		22x45	25x40	30x30		22x50	25x45	30x30	35x25				30x45	35x35
		1.65	1.65	1.65		1.65	1.65	1.65		1.70	1.70	1.70	1.70				1.80	1.80
820		22x50	25x40	30x30	35x25	22x50	25x45	30x35	35x25		25x50	30x35	35x30					35x40
		1.80	1.80	1.80	1.80	1.85	1.85	1.85	1.85		1.90	1.90	1.90					1.95
1000			25x45	30x35	35x30		25x50	30x40	35x30			30x45	35x35					35x45
			2.00	2.00	2.00		2.05	2.05	2.05			2.15	2.15					2.30
1200			25x50	30x40	35x30			30x45	35x35			30x50	35x35					35x50
			2.30	2.30	2.30			2.30	2.30			2.30	2.30					2.65
1500				30x45	35x35			30x50	35x40				35x45					
				2.65	2.65			2.70	2.70				2.75					
1800				30x50	35x45				35x45				35x50					
				3.05	3.05				3.15				3.25					
2200					35x50				35x50									
					3.50				3.60									

Cap (μF)	WV	350V				400V				450V								
56		22x20								22x25								
		0.40								0.41								
68		22x25				22x25				22x30	25x25							
		0.51				0.40				0.48	0.48							
82		22x25	25x20			22x30	25x25			22x35								
		0.56	0.51			0.50	0.50			0.56								
100		22x30	25x25	30x20		22x35	25x30			22x40	25x30	30x25						
		0.69	0.69	0.59		0.55	0.55			0.64	0.61	0.63						
120		22x35	25x25	30x20		22x40	25x30	30x25		22x45	25x35							
		0.75	0.75	0.64		0.60	0.60	0.60		0.72	0.71							
150		22x40	25x30	30x25	35x20	22x45	25x35	30x30		22x50	25x40	30x30	35x25					
		0.82	0.83	0.83	0.76	0.70	0.70	0.70		0.83	0.81	0.80	0.82					
180		22x45	25x35	30x25	35x25	22x50	25x40	30x30	35x25		25x45	30x35						
		0.92	0.92	0.91	0.94	0.85	0.85	0.85	0.85		0.92	0.91						
220		22x50	25x40	30x30	35x25		25x45	30x35	35x30		25x50	30x40	35x30					
		1.05	1.04	1.02	1.04		0.90	0.90	0.90		1.05	1.05	1.03					
270			25x45	30x35	35x30		25x50	30x40	35x30			30x45	35x35					
			1.18	1.17	1.20		1.00	1.00	1.00			1.21	1.19					
330				30x40	35x30			30x45	35x35			30x50	35x40					
				1.34	1.33			1.25	1.25			1.38	1.38					
390				30x45	35x35			30x50	35x40				35x45					
				1.51	1.47			1.35	1.35				1.55					
470					35x40				35x45				35x50					
					1.69				1.45				1.74					
560					35x45				35x50									
					1.90				1.65									

Allowable ripple current (A) at 105°C 120Hz