

## GPCR Series

- Used in audio, OA equipment, power supply as a filter, which needs a higher ripple current.
- With snap-in terminals which can be mounted easily and prevent vibration damage.
- RoHS Compliant (add '-P' Suffix)

### Specifications:

ITEM	SPECIFICATION																
Capacitance Tolerance (120Hz 20°C)	±20% ( M )																
Rated Working Voltage	10 ~ 100WV										160 ~ 450WV						
Operation Temperature Range	- 40 ~ + 85 °C										-25 ~ + 85 °C						
Surge Voltage(V) (20°C)	WV	10	16	25	35	50	63	80	100	160	180	200	250	315	350	400	450
	SV	13	20	32	44	63	79	100	125	200	225	250	300	365	400	450	500
Leakage Current (20°C)	I ≤ 0.02CV or 3mA Whichever is greater																
	After rated voltage applied for 5 minutes Where I : Leakage Current (µA)      C : Capacitance (µF)      V : Rated Voltage (V)																
Dissipation Factor(tanδ) (120 Hz 20°C)	Dissipation factor at 20°C,120Hz shall not exceed the values Showed in the table of standard rating.																
Low Temperature Characteristics	After 2000 hours application of W. V. at 85°C, the capacitor shall meet the limits																
	Capacitance Change										≤ = 20% of Initial Value						
	Dissipation Factor										≤ 200% of Initial Specified Value						
	Leakage Current										≤ Initial Specified Value						
Shelf Life	After 500 hours to place at 85°C without rated voltage applied, the capacitor shall meet the limits as same as load life.																
Others	Satisfied JIS C-5141																

### DIMENSIONS ( unit:mm)

### RIPPLE CURRENT COEFFICIENTS

#### Frequency Multipliers

Freq. ( Hz )	50	60	120	400	1k	2.4k	5k	100k
Coefficient	0.80	0.85	1.00	1.14	1.23	1.30	1.36	1.40

#### Temperature Multipliers

Temp.(°C)	40	45	50	55	60	65	70	75	80	85
Coefficient	2.32	2.21	2.10	1.98	1.85	1.72	1.57	1.40	1.22	1.00

at 120Hz

10 VDC								16 VDC							
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				
8200								0.080	2.45	40	22x25				
10000								0.066	2.60	40	22x30				
12000	0.055	2.45	40	22x25				0.055	2.90	40	22x35	25x25			
15000	0.044	2.80	40	22x30				0.044	3.30	40	22x40	25x30	30x25		
18000	0.036	3.15	40	22x35	25x25			0.036	3.70	40	22x45	25x35	30x30		
22000	0.030	3.50	40	22x40	25x30	30x25		0.030	4.15	40	22x50	25x45	30x30	35x25	
27000	0.024	4.00	40	22x45	25x35	30x30		0.024	4.65	40		25x45	30x35	35x30	
33000	0.020	4.45	40	22x50	25x40	30x30	35x25	0.020	5.25	40			30x40	35x35	
39000	0.017	4.90	40		25x45	30x35	35x30	0.017	5.80	40			30x45	35x35	
47000	0.016	5.50	40		25x50	30x40	35x30	0.014	6.45	40				35x40	
56000	0.014	6.05	40			30x45	35x35	0.011							
25 VDC								35 VDC							
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				
3900								0.119	2.10	35	22x25				
4700								0.098	2.30	35	22x30	25x25			
5600	0.094	2.20	35	22x25				0.082	2.60	35	22x35	25x35	30x30	35x25	

6800	0.078	2.45	35	22x30	25x25			0.068	2.90	35	22x40	25x30	30x30	35x25	
8200	0.064	2.75	35	22x30	25x30			0.056	3.20	35	22x45	25x35	30x30	35x25	
10000	0.053	3.10	35	22x40	25x30	30x25		0.046	3.60	35	22x50	25x40	30x30	35x25	
12000	0.044	3.40	35	22x45	25x35	30x30	35x25	0.038	4.00	35		25x45	30x35	35x30	
15000	0.035	3.90	35		25x40	30x35	35x30	0.030	4.60	35			30x40	35x35	
18000	0.029	4.30	35		25x45	30x40	35x30	0.025	5.10	35			30x45	35x40	
22000	0.024	4.85	35			30x45	35x35	0.021	5.70	35				35x45	
27000	0.019	5.45	35			30x50	35x40	0.017	6.45	35				35x50	
33000	0.016	6.15	35				35x50								
50 VDC								63 VDC							
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				
1800								0.184	1.80	25	22x25				
2200	0.180	1.80	30					0.150	2.00	25	22x30	30x20			
2700	0.147	1.95	30	22x25				0.122	2.30	25	22x35	25x25			
3300	0.120	2.20	30	22x30				0.100	2.55	25	22x40	25x30	30x25		
3900	0.102	2.40	30	22x35	25x25			0.085	2.80	25	22x45	25x30	30x30		
4700	0.084	2.70	30	22x40	25x30	30x25		0.070	3.15	25	22x50	25x35	30x30	35x25	
5600	0.071	3.00	30	22x45	25x35	30x30	35x25	0.059	3.50	25		25x40	30x35	35x30	
6800	0.058	3.35	30	22x50	25x40	30x30	35x30	0.048	3.90	25		25x45	30x40	35x30	
8200	0.048	3.70	30		25x45	30x35	35x30	0.040	4.35	25		25x50	30x45	35x35	
10000	0.039	4.20	30		25x50	30x40	35x35	0.033	4.90	25			30x50	35x40	
12000	0.033	4.65	30			30x50	35x40	0.027	5.45	25				35x50	
15000	0.026	5.30	30				35x45								
18000	0.022	5.90	30				35x50								
80 VDC								100 VDC							
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				
820								0.323	1.75	20	22x25				
1000								0.265	1.95	20	22x30	25x25			
1200	0.221	1.70	20	22x25				0.221	2.15	20	22x35	25x30			
1500	0.176	1.95	20	22x30				0.176	2.45	20	22x40	25x30	30x25		
1800	0.147	2.15	20	22x35	25x25			0.147	2.75	20	22x45	25x35	30x30		
2200	0.120	2.45	20	22x40	25x30	30x25		0.120	3.05	20	22x50	25x40	30x30	35x25	
2700	0.098	2.75	20	22x45	25x35	30x30		0.098	3.45	20		25x45	30x35	35x30	
3300	0.080	3.10	20	22x50	25x40	30x30	35x25	0.080	3.90	20		25x50	30x40	35x30	
3900	0.068	3.40	20		25x45	30x35	35x30	0.068	4.30	20			30x45	35x35	
4700	0.056	3.80	20		25x50	30x40	35x30	0.056	4.75	20				35x40	
5600	0.047	4.20	20			30x45	35x35	0.047	5.30	20				35x50	
6800	0.039	4.70	20				35x40								
8200	0.032	5.25	20				35x50								
160 VDC								180 VDC							
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				
270								0.737	1.20	15	22x25				
330	0.603	1.35	15	22x25				0.603	1.35	15	22x30				
390	0.510	1.50	15	22x30				0.510	1.50	15	22x30	25x25			
470	0.423	1.70	15	22x35	25x25			0.423	1.70	15	22x35	25x30			
560	0.355	1.90	15	22x35	25x30			0.355	1.90	15	22x40	25x30	30x25		
680	0.292	2.15	15	22x40	25x35	30x25		0.292	2.15	15	22x45	25x35	30x30		
820	0.242	2.40	15	22x50	25x35	30x30		0.242	2.40	15	22x50	25x40	30x30	35x25	
1000	0.199	2.75	15		25x40	30x35	35x25	0.199	2.75	15		25x45	30x35	35x30	
1200	0.165	3.05	15		25x50	30x40	35x30	0.165	3.05	15			30x40	35x35	
1500	0.132	3.50	15			30x45	35x30	0.132	3.50	15			30x50	35x40	
1800	0.110	3.95	15			30x50	35x35	0.110	3.95	15				35x45	
2200	0.090	4.50	15				35x45	0.090	4.45	15				35x50	

200 VDC								250 VDC						
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL			
180								1.105	1.00	15	22x25			
220	0.904	1.00	15	22x25	25x30			0.904	1.15	15	22x30	25x35		
270	0.737	1.15	15	22x30	25x25			0.737	1.30	15	22x30	25x25		
330	0.603	1.30	15	22x35	25x25	22x40		0.603	1.45	15	22x35	25x30	22x40	
390	0.510	1.45	15	22x35	25x30	30x25		0.510	1.60	15	22x40	25x35	30x25	
470	0.423	1.65	15	22x40	25x35	30x25	22x40	0.423	1.80	15	22x45	25x35	30x30	35x25
560	0.355	1.85	15	22x45	25x40	30x30	22x40	0.355	2.00	15		25x40	30x35	35x30
680	0.292	2.10	15	22x50	25x40	30x35	35x30	0.292	2.30	15		25x50	30x40	35x30
820	0.242	2.30	15		25x50	30x40	35x30	0.242	2.55	15			30x45	35x35
1000	0.199	2.60	15			30x45	35x35	0.199	2.90	15			30x50	35x40
1200	0.165	2.90	15			30x50	35x40	0.165	3.25	15				35x45
1500	0.132	3.20	15				35x50							
315 VDC								350 VDC						
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL			
82								3.236	0.70	15	22x25			
100	2.653	0.75	15	22x25				2.653	0.80	15	22x30			
120	2.211	0.85	15	22x30				2.211	0.85	15	22x30	25x25		
150	1.769	1.00	15	22x30	25x25			1.769	1.00	15	22x35	25x25		
180	1.474	1.10	15	22x35	25x30			1.474	1.15	15	22x40	25x35	30x25	
220	1.206	1.25	15	22x40	25x30	30x25		1.206	1.30	15	22x45	25x35	30x30	35x25
270	0.982	1.40	15	22x45	25x35	30x30	35x25	0.982	1.45	15		25x45	30x35	35x25
330	0.804	1.60	15	22x50	25x40	30x35	35x25	0.804	1.65	15		25x50	30x40	35x30
390	0.680	1.75	15		25x45	30x35	35x30	0.680	1.85	15			30x45	35x35
470	0.564	2.00	15			30x40	35x35	0.564	2.10	15			30x50	35x40
560	0.473	2.20	15			30x45	35x40	0.473	2.30	15				35x45
680	0.390	2.50	15				35x45	0.390	2.60	15				35x50
820	0.323	2.80	15				35x50							
400 VDC								450 VDC						
CAP (µF)	ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL				ESR 20°C(Ω)	RC 85°C(A)	DF 20°C(%)	DIMENSIONS(mm) ØDXL			
56								5.923	0.55	15	22x25			
68	4.878	0.60	15					4.878	0.60	15	22x30	25x25		
82	4.045	0.70	15	22x25				4.045	0.70	15	22x35	25x30		
100	3.317	0.80	15	22x30	25x25			3.317	0.80	15	22x40	25x30	30x25	
120	2.764	0.90	15	22x35	25x25	18x36		2.764	0.90	15	22x45	25x35	30x30	
150	2.211	1.00	15	22x40	25x30	30x25		2.211	1.00	15	22x50	25x40	30x35	
180	1.843	1.15	15	22x45	25x35	30x30		1.846	1.15	15		25x45	30x40	35x25
220	1.507	1.30	15	22x50	25x40	30x30	35x25	1.507	1.30	15		25x50	30x45	35x30
270	1.228	1.50	15		25x45	30x35	35x30	1.228	1.50	15			30x50	35x35
330	1.005	1.70	15		25x50	30x40	35x35	1.005	1.70	15				35x40
390	0.850	1.85	15			30x45	35x35	0.850	1.85	15				35x45
470	0.705	2.10	15				35x40	0.705	2.10	15				35x50
560	0.592	2.30	15				35x50							