



# Conductive Polymer Aluminum Solid Capacitor DR Cap

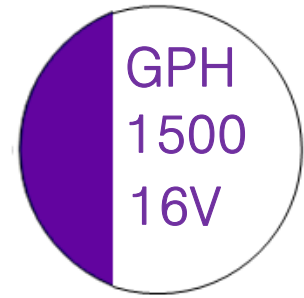
## GP series

### ■ Features

- Higher Capacitance
- High voltage
- Guaranteed at 125°C for 2000 hrs.

### ■ Applications

- SPS
- LED lighting , LED TV
- RoHS compliance and lead-free

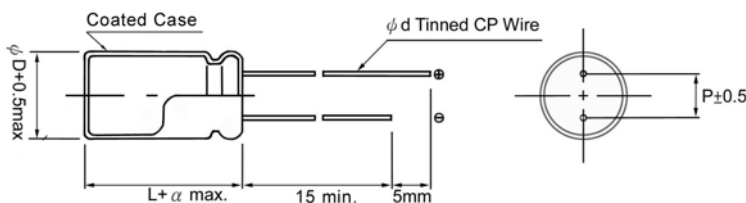


## Specifications

Items	Characteristics		
Category Temperature Range	-55 ~ +125°C		
Rated Working Voltage Range	16 ~ 63Vdc		
Capacitance Tolerance	±20% (M) ( 120Hz , 20°C )		
Surge Voltage	x 1.15		
DC Leakage Current	I=0.2 CV (After rated voltage applied for 2 minutes)		
Dissipation Factor ( tanδ )	0.12 max for diameter 8mm / 0.15 max. for diameter 10mm (at 20°C, 120 Hz)		
ESR (100 K~300 KHz, 20°C)	Value in characteristics table		
Temperature Characteristic Impedance Ratio at 100 KHz	-55°C	Z / Z <sub>20°C</sub>	0.75~1.25
	+125°C	Z / Z <sub>20°C</sub>	0.75~1.25
Load Life (After 125°C, 2000 hrs, rated voltage applied)	Capacitance change	Within ±30% of the initial measured value	
	Dissipation Factor	Less than 300% of the specified value	
	ESR	Less than 300% of the specified value	
	Leakage Current	Less than the specified value	
Moisture Resistance (After 60°C, 90~95%RH, 1000 hrs, no voltage)	Capacitance change	Within ±20% of the initial measured value	
	Dissipation Factor	Less than 150% of the specified value	
	ESR	Less than 150% of the specified value	
	Leakage Current	Less than the specified value	

\* Leakage Current should be tested after voltage treatment.

## Dimensions (mm)



Size Code	ϕ D	L	α	P	ϕ d
E08 8		8	1.5	3.5	0.6
E12 8		12	1.5	3.5	0.6
F12 10		12	1.5	5.0	0.6



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## Table GP series Characteristics List

Rated Voltage (V)	Nominal Capacitance (120Hz, 20°C) (μF)	Size Code	φD	L	ESR (100K~300KHz) (mΩ) (max)	Max Ripple Current (100KHz) (mA rms)		Part Number
						105<Tx≤125°C	Tx≤105°C	
16	330	E08	8	8	13	1410	4700	DRGP0330M16E08
	470	E12	8	12	11	1630	5400	DRGP0470M16E12
	470	F12	10	12	11	1890	6300	DRGP0470M16F12
	820	E12	8	12	11	1680	5600	DRGP0820M16E12
	820	F12	10	12	11	1890	6300	DRGP0820M16F12
	1200	F12	10	12	11	1890	6300	DRGP1200M16F12
	1500	F12	10	12	11	1890	6300	DRGP1500M16F12
25	100	E12	8	8	32	840	2360	DRGP0100M25E08
	330	E12	8	12	24	840	2800	DRGP0330M25E12
	470	F12	10	12	20	960	3200	DRGP0470M25F12
	680	F12	10	12	20	1460	3650	DRGP0680M25F12
30	270	E12	8	12	28	690	2300	DRGP0270M30E12
	470	F12	10	12	28	960	3200	DRGP0470M30F12
35	100	E12	8	12	28	690	2300	DRGP0100M35E12
	150	E12	8	12	28	1160	2900	DRGP0150M35E12
	180	F12	10	12	28	1264	3650	DRGP0180M35F12
	220	F12	10	12	28	1264	3650	DRGP0220M35F12
50	56	E12	8	12	30	660	2200	DRGP0056M50E12
	120	F12	10	12	30	780	2600	DRGP0120M50F12
63	100	E12	8	12	38	870	2200	DRGP0100M63E12
	47	F12	10	12	29	780	2600	DRGP0047M63F12
	150	F12	10	12	36	1050	2640	DRGP0150M63F12

### Frequency coefficient for ripple current

Frequency	100Hz ≤ f < 1 KHz	1 KHz ≤ f < 10 KHz	10 KHz ≤ f < 100 KHz	100 KHz ≤ f ≤ 500 KHz
Coefficient	0.05	0.3	0.7	1.0