

Data Sheet

Customer : _____

Product : Conductive Polymer Aluminum Solid Electrolytic Capacitor
Radial Type, High Temperature, 135°C 2,000hours – HPG Series

Size : 8x12mm ~ 10x12mm

Issued Date : 01-Sep.-2025

Edition : Ver.1

Record of change

Date	Ver.	Description	Page

HITANO ENTERPRISE CORP.

7F-7, No. 3, Wu Chuan 1st Road, New Taipei Industrial Park,
New Taipei City, TAIWAN, R.O.C.
Tel: +886 2 2299 1331 (Rep.)
Fax: +886 2 2298 2466, 2298 2969

Prepared by	Checked by	Approved by	Accepted by (customer)
01-Sep.-2025	01-Sep.-2025	01-Sep.-2025	
Randy Yu	Michelle Lin	Arthur Su	

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

Radial Lead, 135°C High Temperature

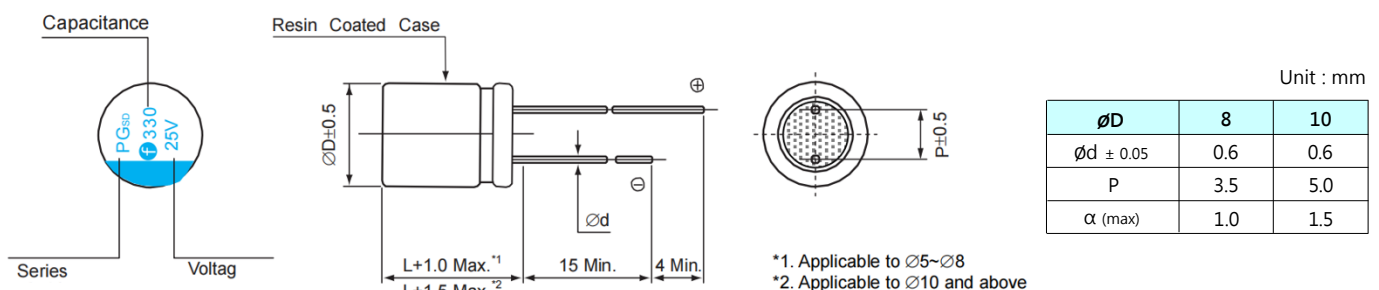
- Voltage up to 63V, Ultra Low ESR & high ripple current capability
- Endurance: 2,000 hours at 135°C
- Rated Voltage : 25V ~ 63V
- Rated capacitance : 39 ~ 470μF

SPECIFICATIONS

Item	Performance Characteristics	
Operating Temperature range	-55 + 135°C	
Rated Voltage Range	25V ~ 63V	
Capacitance Tolerance	± 20% (at 120 Hz/ 20°C)	
Surge Voltage	Rated Voltage x 1.15	
Leakage Current	Within the specified value as in standard rating	
Dissipation Factor (tan δ)	0.12 or less, less than or equal to the specified value at 20°C and 120Hz	
Temperature Characteristics (Impedance ratio at 100 KHz)	Z (-25°C) / Z (+20°C)	≤ 1.15
	Z (-55°C) / Z (+20°C)	≤ 1.25
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 25~63V 2,000 hours at 135°C.	
	Capacitance change	≤ ±30 % of the initial value
	D. F. (Tan δ)	≤ 150% of initial specified value
	ESR	≤ 150% of initial specified value
	Leakage current	Initial specified value or less
Bias Humidity Test	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them at 60°C, 90 to 95% RH for 1,000 hours.	
	Capacitance change	≤ ± 20% of the initial value
	D. F. (Tan δ)	≤ 150% of initial specified value
	ESR	≤ 150% of initial specified value
	Leakage current	Initial specified value or less
Surge Voltage Test	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltage specified At 135°C for 30 seconds through a protective resistor (R=1KΩ) and discharge for 5 minutes 30 seconds.	
	Capacitance change	≤ ± 20% of the initial value
	D. F. (Tan δ)	≤ 150% of initial specified value
	ESR	≤ 150% of initial specified value
	Leakage current	Initial specified value or less
Failure Rate	0.5% per 1,000 hours maximum (Confidence level 60% at 125°C)	

※ In case of any doubt arises, measure the leakage current after voltage applied for 120 minutes at 125°C.

Dimension



CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

■ Part Numbering (example: 120 μ F 50V 8x12mm)

HPG **121** **M** **1H** **R** **B** **D** **120** **B** **P** **00**
 SERIES CAPACITANCE TOL. W.V. TYPE LEAD DIA. LENGTH PRINTING COLOR RUBBER LEAD PROCESS

■ Standard Products Table

Rated voltage (V.DC)	Rated Capacitance (μ F)	Case Size D x L (mm)	$\tan \delta$	Leakage Current (μ A)	ESR (m Ω max./ 20°C 100KHz to 300KHz)	Rated ripple current (mA rms/135°C, 100KHz)
25 (1E)	220	8 x 12	0.12	1,100	20	2,300
	270	8 x 12	0.12	1,350	19	2,300
	330	10 x 12	0.12	1,650	20	2,200
	470	10 x 12	0.12	2,350	15	2,900
35 (1V)	150	8 x 12	0.12	1,050	22	2,200
	220	8 x 12	0.12	1,540	21	2,300
	270	10 x 12	0.12	1,890	20	2,200
	330	10 x 12	0.12	2,310	16	2,800
50 (1H)	82	8 x 12	0.12	820	26	2,100
	120	8 x 12	0.12	1,200	25	2,100
		10 x 12	0.12	1,200	25	2,100
	180	10 x 12	0.12	1,800	19	2,500
63 (1J)	39	8 x 12	0.12	491	28	1,900
	56	8 x 12	0.12	705	27	2,100
	68	10 x 12	0.12	856	28	2,000
	100	10 x 12	0.12	1,260	24	2,100

■ Frequency coefficient of allowable ripple current

Frequency	120 Hz $\leq f < 1$ KHz	1 KHz $\leq f < 10$ KHz	10 KHz $\leq f < 100$ KHz	100 KHz $\leq f \leq 300$ KHz
Coefficient	0.05	0.30	0.70	1.00