HITANO
ENTERPRISE CORP. ®

Data Sheet

Customer: _____

Product: Conductive Polymer Aluminum Solid Capacitor
SMD Type Endurance 105℃ 10,000Hours – ELS Series

Size : 6.3x5.8mm ~ 10x12.7mm

Issued Date: 17-Feb.-2025

Edition: Ver. 1

Record of change

Date	Ver.	Description	Page
27-Sep.-2023	1	Add.	
25-Feb.-2025	2	Revise Characteristics Capacitance Range 8.2uF ~ 1500 uF & Diagram of dimensions	1
		Add Lead Spacing And Diameter F8 & F9, Add & Delete Ripple Current	1~4

HITANO ENTERPRISE CORP.

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25-Feb.-2025	25-Feb.-2025	25-Feb.-2025	
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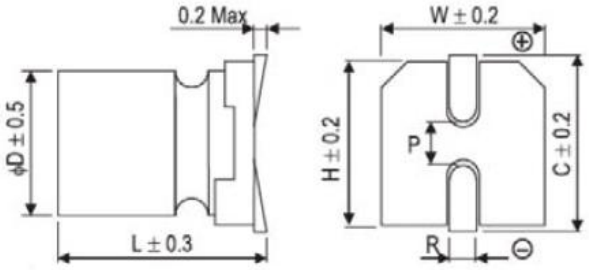
Features

- SMD TYPE. Conductive Polymer Aluminum Solid Capacitors
- This type has lowest ESR level and excellent performance at high frequency through low profile.
- Ideal capacitor for digital and high frequency devices.
- Load life 105℃ **10,000** hours assured.

Characteristics

Voltage Range	2.5 ~100VDC	
Capacitance Range	8.2uF ~ 1500uF	
Temperature Range	-55 ~ +105℃	
Capacitance Tolerance	M=+20%/-20% , K=+10%/-10%　(120Hz, 20℃)	
Leakage Current	Capacitance(μF) x Rated Voltage(Vdc) After 2minutes, see standard rating	
Dissipation Factor (tanδ) (120Hz, 20℃)	See standard rating	
ESR (100KHz, 20℃)	See standard rating	
Endurance (Rated Voltage at 105℃ 10,000h, restored to 20℃)	Appearance	≦No significant damage
	Capacitance Change (μF)	Within ±20% of initial measured value
	Dissipation Factor (tanδ)	≦150% of an initial specified value
	ESR (mΩ)	≦150% of an initial specified value
	Leakage Current (μA)	≦Initial specified value
Moisture Resistance (Test at 60℃, 90~95RH for 1000hrs, L.C. should be tested after voltage treatment)	Capacitance Change (μF)	Within ±20% of initial measured value
	Dissipation Factor (tanδ)	≦150% of an initial specified value
	ESR (mΩ)	≦150% of an initial specified value
	Leakage Current (μA)	≦Initial specified value
Resistance to Soldering Heat	Capacitance Change (μF)	Within ±10% of initial measured value
	Dissipation Factor (tanδ)	≦130% of an initial specified value
	ESR (mΩ)	≦130% of an initial specified value
	Leakage Current (μA)	≦Initial specified value

Diagram of dimensions



Lead Spacing And Diameter

Case Size	φD	L	A	B	C	W	P±0.2
C6	6.3	5.8	6.5	6.5	7.2	0.5 ~ 0.8	2.1
C8	6.3	7.7	6.5	6.5	7.2	0.5 ~ 0.8	2.1
C10	6.3	9.2	6.5	6.5	7.2	0.5 ~ 0.8	2.1
C12	6.3	11.5	6.5	6.5	7.2	0.5 ~ 0.8	2.1
D8	8	7.7	8.3	8.3	9.0	0.8 ~ 1.1	3.2
D10	8	9.4	8.3	8.3	9.0	0.8 ~ 1.1	3.2
D12	8	11.7	8.3	8.3	9.0	0.8 ~ 1.1	3.2
F8	10	7.7	10.3	10.3	11.0	0.8 ~ 1.1	4.6
F9	10	8.7	10.3	10.3	11.0	0.8 ~ 1.1	4.6
F11	10	10.7	10.3	10.3	11.0	0.8 ~ 1.1	4.6
F13	10	12.7	10.3	10.3	11.0	0.8 ~ 1.1	4.6

Frequency coefficient for ripple current

Frequency	120Hz≦f<1KHz	1KHz≦f<10KHz	10KHz≦f<100KHz	100KHz≦f<500KHz
Coefficient	0.05	0.3	0.7	1

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Ripple Current: mA /rms at 100KHz, 105℃

W.V.(V)	Capacitance (μF)	Size φDxL(mm)	Size Code	DF (%)	L.C. (μA,2min)	ESR(mΩ) (20℃, 100KHz)	RC(mArms) (105℃, 100KHz)
2.5(0E)	330	6.3x7.7	C8	0.1	300	14	3200
	390	6.3x7.7	C8	0.1	300	14	3200
	470	6.3x7.7	C8	0.1	300	14	3600
	560	6.3x7.7	C8	0.1	300	14	3600
	680	8x7.7	D8	0.1	340	9	5000
	680	8x11.7	D12	0.1	340	8	4500
	820	8x7.7	D8	0.1	410	9	5000
	820	8x11.7	D12	0.1	410	8	5400
	1000	8x7.7	D8	0.1	500	9	5000
	1500	8x11.7	D12	0.1	750	8	5400
	1500	10x12.7	F13	0.1	750	8	5500
4(0G)	100	6.3x7.7	C8	0.1	300	16	2200
	220	8x7.7	D8	0.1	300	11	5000
	330	6.3x7.7	C8	0.1	300	16	3700
	330	8x7.7	D8	0.1	300	11	5000
	390	6.3x7.7	C8	0.1	312	16	3700
	560	8x7.7	D8	0.1	448	11	5000
	560	8x11.7	D12	0.1	448	9	5400
	680	8x7.7	D8	0.1	544	11	5000
	1200	8x11.7	D12	0.1	960	9	5400
	1200	10x12.7	F13	0.1	960	9	5500
	1500	8x11.7	D12	0.1	1200	9	5400
6.3(0J)	82	6.3x7.7	C8	0.1	300	20	2200
	100	6.3x7.7	C8	0.1	300	20	2500
	150	8x7.7	D8	0.1	300	15	2600
	180	8x7.7	D8	0.1	300	15	2600
	220	6.3x7.7	C8	0.1	300	14	3200
	270	6.3x7.7	C8	0.1	340	14	3200
	330	6.3x7.7	C8	0.1	416	14	3200
	330	8x7.7	D8	0.1	416	15	4500
	390	8x7.7	D8	0.1	491	9	4500
	470	8x7.7	D8	0.1	592	9	4500
	470	8x11.7	D12	0.1	592	9	4300
	560	8x7.7	D8	0.1	706	9	4500
	560	8x11.7	D12	0.1	706	9	4800
	680	10x12.7	F13	0.1	857	9	5200
	820	8x11.7	D12	0.1	1033	9	5100
	820	10x12.7	F13	0.1	1033	9	5500
	1000	8x11.7	D12	0.1	1260	9	5100
	1000	10x12.7	F13	0.1	1260	9	5500
10V	47	6.3x7.7	C8	0.1	300	16	2100
	56	6.3x7.7	C8	0.1	300	16	2100
	100	6.3x5.8	C6	0.1	300	26	1800
	100	6.3x7.7	C8	0.1	300	16	2500
	120	6.3x5.8	C6	0.1	300	16	2900
	120	8x7.7	D8	0.1	300	16	2600
	150	8x7.7	D8	0.1	300	16	3000
	180	6.3x7.7	C8	0.1	360	16	3300
	220	6.3x7.7	C8	0.1	440	16	3300
	220	6.3x7.7	C8	0.1	440	16	3500
	270	6.3x7.7	C8	0.1	540	16	3800
	270	10x7.7	F8	0.1	540	14	3500
	330	8x7.7	D8	0.1	660	14	3300
	330	8x11.7	D12	0.1	660	14	4000
	560	10x12.7	F13	0.1	1120	12	5300
16V	33	6.3x7.7	C8	0.1	300	18	2000
	39	6.3x7.7	C8	0.1	300	18	2500
	56	8x7.7	D8	0.1	300	18	2300
	82	8x7.7	D8	0.1	300	18	2300

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Ripple Current: mA /rms at 100KHz, 105℃

W.V.(V)	Capacitance (μF)	Size φDxL(mm)	Size Code	DF (%)	L.C. (μA,2min)	ESR(mΩ) (20℃, 100KHz)	RC(mArms) (105℃, 100KHz)
16V	100	6.3x5.8	C6	0.1	320	25	1600
	100	6.3x7.7	C8	0.1	320	24	2600
	150	8x7.7	D8	0.1	480	18	3200
	180	8x11.7	D12	0.1	576	18	3700
	220	8x11.7	D12	0.1	704	18	3700
	270	6.3x9.2	C10	0.1	864	22	3200
	270	8x7.7	D8	0.1	864	18	3200
	270	8x11.7	D12	0.1	864	14	4400
	330	6.3x7.7	C8	0.1	1056	18	3800
	330	10x12.7	F13	0.1	1056	14	4800
	470	6.3x9.2	C10	0.1	1504	18	3800
	470	8x9.4	D10	0.1	1504	20	5400
	470	10x12.7	F13	0.1	1504	14	6100
	560	8x11.7	D12	0.1	1792	14	5000
	820	10x12.7	F13	0.1	2624	12	6100
	1500	10x12.7	F13	0.1	4800	16	6100
20V	390	8x11.7	D12	0.1	200	16	4700
	560	10x12.7	F13	0.1	224	22	4700
25V	10	6.3x7.7	C8	0.1	200	42	1900
	22	6.3x7.7	C8	0.1	200	42	1900
	22	8x7.7	D8	0.1	200	42	1600
	27	6.3x7.7	C8	0.1	200	42	1900
	47	6.3x7.7	C8	0.1	200	32	2600
	56	6.3x5.8	C6	0.1	200	32	1600
	56	6.3x7.7	C8	0.1	200	32	2600
	68	6.3x7.7	C8	0.1	200	32	2600
	100	6.3x7.7	C8	0.1	200	32	2400
	100	8x9.4	D10	0.1	200	20	3800
	100	8x11.7	D12	0.1	200	26	3000
	220	6.3x9.2	C10	0.1	200	26	3800
	220	8x11.7	D12	0.1	200	20	4200
	330	6.3x11.5	C12	0.1	200	26	2600
	330	8x11.7	D12	0.1	200	18	4600
	330	10x12.7	F13	0.1	200	24	4000
	390	10x12.7	F13	0.1	200	18	4600
	470	10x10.7	F11	0.1	235	16	4000
	680	10x12.7	F13	0.1	340	22	5200
	820	10x12.7	F13	0.1	410	18	4800
35V	10	6.3x7.7	C8	0.1	200	42	1600
	56	8x9.4	D10	0.1	200	27	2800
	100	6.3x7.7	C8	0.1	200	28	2300
	100	6.3x9.2	C10	0.1	200	26	2500
	100	8x9.4	D10	0.1	200	27	2800
	150	10x12.7	F13	0.1	200	30	2400
	220	8x9.4	D10	0.1	200	30	2400
	220	8x11.7	D12	0.1	200	28	2400
	330	10x10.7	F11	0.1	231	26	2800
	470	10x12.7	F13	0.1	329	26	4000
50V	12	6.3x7.7	C8	0.1	200	42	1200
	22	8x7.7	D8	0.1	200	37	1300
	39	8x11.7	D12	0.1	200	28	2100
	47	6.3x7.7	C8	0.1	200	26	1900
	47	8x11.7	D12	0.1	200	28	2100
	82	10x12.7	F13	0.1	200	26	2600
	100	8x11.7	D12	0.1	200	26	2800
	100	10x10.7	F11	0.1	200	24	3300
63V	8.2	6.3x7.7	C8	0.1	200	42	1100
	12	8x7.7	D8	0.1	200	37	1300

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Ripple Current: mA /rms at 100KHz, 105℃

W.V.(V)	Capacitance (μF)	Size ϕDxL(mm)	Size Code	DF (%)	L.C. (μA,2min)	ESR(mΩ) (20℃, 100KHz)	RC(mArms) (105℃, 100KHz)
63V	22	10x7.7	F8	0.1	200	34	1800
	22	10x8.7	F9	0.1	200	32	1400
	33	8x11.7	D12	0.1	200	29	2100
	56	10x12.7	F13	0.1	200	26	2500
100V	22	8x11.7	D12	0.1	200	20	2600
	47	10x12.7	F13	0.1	200	20	2800