

## *Data Sheet*

Customer: \_\_\_\_\_

Product: Aluminum Electrolytic Capacitors – ELA Series \_\_\_\_\_

Size : 8x12mm ~ 18x40mm \_\_\_\_\_

Issued Date: 25-Oct.-2023 \_\_\_\_\_

Edition: Ver. 1 \_\_\_\_\_

### Record of change

Date	Ver.	Description	Page
25-Oct.-2023	1		

### **HITANO ENTERPRISE CORP.**

7F-7, No. 3, Wu Chuan 1<sup>st</sup> 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

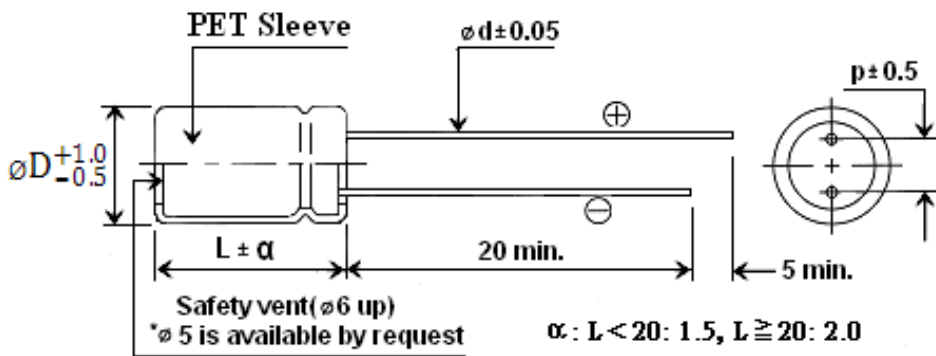
Prepared by	Checked by	Approved by	Accepted by (customer)
25-Oct.-2023	25-Oct.-2023	25-Oct.-2023	
<i>Andy Hsu</i>	<i>Hwa Wu</i>	<i>Hwa Wu</i>	

- High Temperature
- Load life 2000 hrs at 130°C
- Safety vent construction design.

**Characteristics**

<b>Voltage Range</b>	10 to 100 VDC							
<b>Capacitance Range</b>	1 to 4700uF							
<b>Temperature Range</b>	-40 to +130°C							
<b>Leakage Current</b>	I ≤ 0.01CV or 3uA, whichever is greater 1 minutes after Rated Voltage applied							
<b>Capacitance Tolerance</b>	±20% at 120Hz, 20°C							
<b>Dissipation Factor</b>	Working Voltage (V)	10	16	25	35	50	63	100
	tanδ(%) max	20	16	14	12	10	9	8
<b>Low Temperature Characteristic (120Hz)</b>	Working Voltage (V)	10	16	25	35	50	63	100
	Z-25°C/Z +20°C	3	2	2	2	2	2	2
	Z-40°C/Z +20°C	6	4	3	3	3	3	3
<b>Load life : (+130°C, 2000h)</b>	Test conditions Ambient temperature : +130°C After test requirement at +20°C Capacitance change : ≤ ±30% of the initial measured value value Dissipation factor : ≤ 300% of the initial specified value value Leakage current : ≤ The initial specified value							
	<b>Shelf life (at 105°C)</b> Test conditions Duration time : 1000Hrs Ambient temperature : +105°C Applied voltage : None After test requirement at +20°C: Same limits as Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.							

**Drawing**



Dφ	5	6.3	8	10	13	16	18
p	2.0	2.5	3.5	5.0	5.0	7.5	7.5
dφ	0.5	0.5	0.5	0.6	0.6	0.8	0.8

**Ripple Current Coefficients**

Frequency(Hz)	50/60	120	1K	10K	≥100K
Cap<10	0.35	0.42	0.6	0.8	1.0
10<Cap<47	0.45	0.55	0.75	0.85	1.0
47<Cap<470	0.6	0.70	0.85	0.95	1.0
470<Cap<2200	0.65	0.75	0.90	0.98	1.0
C>2200	0.75	0.80	0.95	1.0	1.0

**Temperature Coefficieng**

Temp.(°C)	60	70	85	105	130
Factor	2.4	2.1	1.78	1.65	1.00

**Dimensions, Maximum Permissible Ripple Current & Impedance**

	10		16		25		35		50		63		100	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1									8x12	32				
2.2									8x12	45				
3.3									8x12	63				
4.7									8x12	90			8x12	90
10									8x12	180			8x12	180
22									8x12	234			8x12	198
33									8x12	270	8x12	225	10x13	234
47									8x12	270	10x13	360	10x16	297
100							8x12	324	10x13	468	10x16	405	13x21	603
220					8x12	324	10x13	558	10x20	801	13x21	738	16x25	990
330	8x12	324	8x12	324	10x13	558	10x16	720	13x21	900	13x25	900	16x30	1170
470	10x13	558	10x13	558	10x16	720	10x20	864	13x25	1080	16x25	1350	18x30	1440
1000	10x20	864	10x20	864	13x21	990	13x25	1287	16x30	1962	16x30	1665		
1500											18x40	2115		
2200	13x25	1287	13x25	1287	16x30	2070	16x35	2295	18x40	2520				
3300	16x25	1710	16x30	2070	16x35	2295	18x35	2520						
4700	16x30	2070	16x35	2295										

Ripple Current ( mA, rms ) at 130°C 100KHz

**Part Numbering System**

<b>ELA</b>	<b>101</b>	<b>M</b>	<b>50</b>	<b>A</b>	<b>-</b>	<b>T1</b>
<b>SERIES</b>	<b>CAPACITANCE</b>	<b>TOL.</b>	<b>W.V.</b>	<b>PACKAGE</b>	<b>SIZE</b>	<b>LEAD SPACE</b>
	IN 3DIGITS	K= ± 10%	0G= 4V	B= Bulk	Omit if only	Omit if Bulk
	010= 1.0uF	M= ± 20%	0J= 6.3V	C5= Cut 5mm	one size	T1= L/S 2.5mm Taped
	4R7= 4.7 uF		10= 10V	A= Ammo Pack	A=Smaller	TA= Lead forming space
	101= 100uF		25= 25V	R= Tape&Reel	size	5mm Taped
	331=330uF		63= 63V			T35= L/S 3.5mm Taped
			2A=100V	F5= Lead formed & cut 5mm		T2=L/S 5mm Taped