

Data Sheet

Customer : _____

Product : Aluminum Electrolytic Capacitors – EGB Series _____

Size : 8x12mm ~ 18x50mm _____

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 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)
25-Oct.-2023	25-Oct.-2023	25-Oct.-2023	
<i>Andy Hsu</i>	<i>Hwa Wu</i>	<i>Hwa Wu</i>	

Subject : Storage of Aluminium Electrolytic Capacitors

We recommend the following conditions for storage :

1. It is recommended to keep capacitors between the ambient temperatures of 5°C to 35°C and a relative humidity of 75% or below.
2. Confirm that the environment does not have any of the following conditions :
 - (1) Damp conditions such as water, saltwater spray, or oil spray or fumes. High humidity or humidity condensation situations.
 - (2) In an atmosphere filled with toxic gasses (such as hydrogen sulfide, sulfurous acid, nitrous acid, chlorine, ammonia, etc.)
 - (3) Being exposed to direct sunlight, ozone, ultraviolet ray, or radiation.
 - (4) Being exposed to acidic or alkaline solutions.
3. Keep capacitors in the original package.

4. Storage life & Re-aging :

When Aluminium Electrolytic Capacitors are stored without applied voltage, their L.C.

(Leakage Current) characteristic increases over time. For long-term stored products, the following treatments must be performed before use :

- (1) For Low Voltage Aluminium Electrolytic Capacitors (i.e., Working Voltage W.V. \leq 120V) :

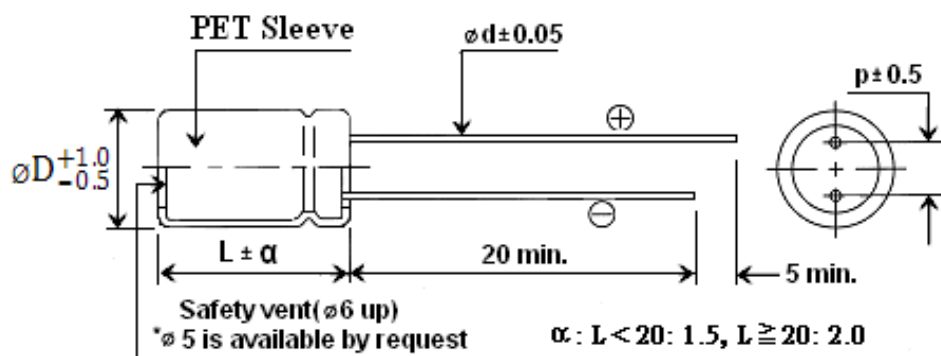
After one year of storage, a test must be performed before use. If the L.C. value exceeds the specified value, it is recommended not to use them, as lifespan and quality cannot be 100% guaranteed.
- (2) For Medium/High Voltage Aluminium Electrolytic Capacitors (i.e., Working Voltage W.V. \geq 160V) :
 - (A) If stored for more than 6 months, a test must be performed before use to ensure lifespan and quality.
 - (B) If stored for 6-24 months and the L.C. value is between 25% and 40% of the specified value, it is recommended to recharge (re-agent) before use. If the L.C. value exceeds 40% of the specified value, do not use.
- (3) Re-aging condition : It is recommended to apply D.C. working voltage to the capacitor for 2 hours through 1K Ω of protective series resistor.

- High Temperature Long life
- Load life 4000 hrs at 130°C
- Applicable to LED drivers, electronic ballast
- Sleeve Color : Silver Print in Brown Sleeve

Characteristics

Voltage Range	160 to 450 VDC						
Capacitance Range	1 to 220uF						
Temperature Range	-40 to +130°C						
Leakage Current	I ≤ 0.01CV or 3uA, whichever is greater 1 minutes after Rated Voltage applied						
Capacitance Tolerance	±20% at 120Hz , 20°C						
Dissipation Factor	Working Voltage (V)	160	200	250	350	400	450
	tanδ(%) max	15	15	15	20	20	20
Low Temperature Characteristic (120Hz)	Working Voltage (V)	160	200	250	350	400	450
	Z-25°C/Z +20°C	3	3	3	5	5	6
	Z-40°C/Z +20°C	6	6	6	6	6	9
Load life : (+130°C, 4000h)	Test conditions Duration time : as right Ambient temperature : +130°C Applied voltage : Rated DC working voltage 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						
Shelf life (at 105°C)	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	20	22
p	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	10
dφ	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8	0.8

Ripple Current Coefficients

Frequency(Hz)	120	1K	10K	≥100K
160V-450V	0.5	0.8	0.9	1.0

Temperature Coefficieng

Temp.(°C)	60	70	85	105	130
Factor	2.4	2.1	1.78	1.65	1

Dimensions, Maximum Permissible Ripple Current & Impedance

WV Cap(uF)	160		200		250		350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1							8x12	39	8x12	43		
1.5							8x16	58	8x16	58	8x16	56
1.8							8x16	60	8x16	60	8x16	59
2.2					8x12	51	10x10	60	10x10	61	10x16	62
2.8			8x12	51	8x12	58	10x16	76	10x16	80	10x16	64
3.3	8x12	56	8x12	58	8x12	64	10x16	80	10x16	84	10x20	70
4.7	8x12	62	8x16	101	8x16	106	10x20	114	10x20	114	13x21	83
5.6	8x16	66	8x16	118	10x10	96	10x20	122	13x21	132	13x21	115
6.8	8x16	70	8x16	128	10x16	135	10x20	152	13x21	180	13x21	140
8.2	10x9	116	10x10	132	10x10	132	13x21	164	13x21	184	13x21	146
10	10x9	152	10x10	172	10x16	190	13x21	200	13x25	224	13x21	180
15	10x16	240	10x20	262	10x20	262	13x25	268	13x25	268	13x25	235
22	10x20	320	13x21	344	13x21	344	16x25	360	16x25	384	16x25	316
33	13x21	384	13x21	400	13x25	424	16x30	428	18x30	508	18x30	400
47	13x25	472	13x25	520	16x25	552	18x30	560	18x35	600	18x35	492
68	16x25	600	16x25	600	16x30	624	18x40	720	18x40	720	18x40	568
82	16x25	660	16x30	720	18x25	720						
100	16x25	768	16x30	880	18x30	776			10x50	824	18x50	672
150	18x30	840	16x35	1080								
220	18x25	1200										

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