



DATE : Sep 12, 2016

TK NO. : H-LG-C008A

SPECIFICATION

Customer: _____

Name of product: LG series Aluminum Electrolytic Capacitors

Symbol: 2GLG102M8R55

Approved by	Title	Signature	Date

Description:

Please return a sheet of this specification after your approval. Please connect with technical department of our **Maruko Office**, if you have any technical question.

TOSHIN KOGYO CO.,LTD.

[HEAD OFFICE]

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1. Application

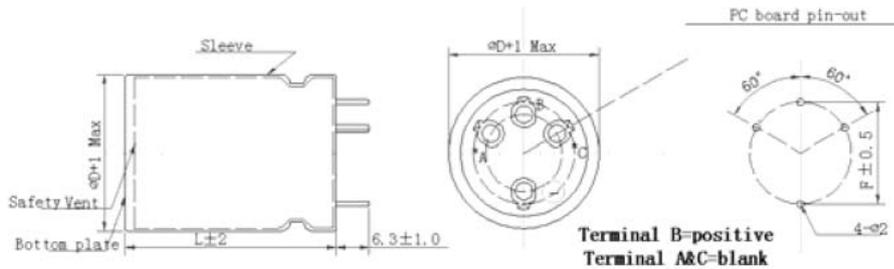
This specification is applicable to the performance of aluminum electrolyte capacitors of type-LG [RoHS corresponding].

2. Operating Temperature Range

-25°C~+85°C

3. Capacitance Tolerance

±20% (M) (25°C, 120Hz)



ΦD (mm)	35
L (mm)	55

4. PERFORMANCE

Rated Ripple Current (120Hz, 85°C)

TK Part Number	Rated Voltage [V DC]	Nominal Capacitance [μ F]	tan δ (120Hz) (25°C)	Leakage Current [μ A]	Ripple Current [mA]	Case size D × L (mm)
2GLG102M8R55	400	1000	max 0.15	max 3000	max 4100	35x55

*Part Number System

Rated Voltage	Series	Nominal Capacitance	Tolerance	Terminal Length	Size
<u>2G</u> 2G: 400V	<u>LG</u>	<u>102</u> 102:1000uF	<u>M</u> M: ±20%	8	R55 R55:35x55

5. Tangent of loss angle (tan δ)

(120Hz / +20°C)

WV (V DC)	400
tan δ	0.15

6. Leakage Current

Less than 0.02CV or 3000uA whichever is smaller after 5 minutes at 25°C.

Note: C: Nominal Capacitance(μ F) , V: Rated Voltage(V D.C.)

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7. Multiplier for Ripple Current

When the ripple frequency differs from the specification shown the list of standard products, multiply the value with the coefficient shown below, and use the products under the obtained value.

< Frequency coefficient >

Frequency (Hz)	50	120	1K	10K	50K
160~250	0.81	1.00	1.32	1.45	1.50
350~450	0.77	1.00	1.30	1.41	1.43

8. Load Life Test

Capacitors shall be applied the rated voltage overlapped by an allowable ripple current at $85\pm 2^{\circ}\text{C}$ for 2000hours.

Capacitance Change	Within $\pm 20\%$ of the initial value.
Dissipation Factor	Less than the 200% of the specified value.
Leakage Current	Less than the specified value.

9. Shelf Life Test

Capacitors shall be stored at $85\pm 2^{\circ}\text{C}$ with no voltage applied for 1000 hours.

Capacitance Change	Within $\pm 20\%$ of the initial value.
Dissipation Factor	Less than the 150% of the specified value.
Leakage Current	Less than the specified value.

10. Surge Voltage Test

Capacitors shall be applied the surge voltage through a $(100\pm 50)/\text{CR}$ (k Ω) resistor in series for 30 ± 5 seconds in every 6 ± 0.5 minutes at $15\sim 35^{\circ}\text{C}$ procedure shall be rated 1000 times. Then the capacitors shall be left under normal humidity for 1~2hours before measurement.

(CR: Nominal Capacitance (uF))

WV (V D.C.)	400
Surge voltage	450

Note: This test simulates over voltage at abnormal situations and not be hypothesizing that over voltage is always applied.

Capacitance Change	Within $\pm 20\%$ of the initial value.
Dissipation Factor	Less than the 200% of the specified value.
Leakage Current	Less than the specified value.

11. Low Temperature Characteristics (Impedance ratio at 120Hz)

Rated Voltage (V D.C.)	400
Z(-25°C)/Z(+20°C)	4

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12. Resistance to Solder Heat

Terminals of the capacitor shall be immersed into solder bath at $245 \pm 5^\circ\text{C}$ for 2 ± 0.5 seconds to 1.5~2.0mm from the body of capacitor covered with a thermal screen.

Appearance	Notable changes shall not be found.
Leakage Current	Not more than the specified value.
Capacitance Change	Within $\pm 10\%$ of the initial value.
Dissipation Factor	Not more than the specified value.

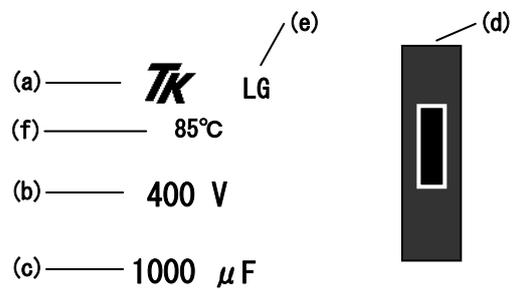
13. Operation of Pressure Relief Vent

When the capacitor shall be connected in inverse polarity, and applied DC current at 1A constant, the pressure relief device shall open in such a way as to avoid any danger of fire or explosion of capacitor elements or cover.

14 Marking

The following items shall be marked on each capacitor. (White marking on black sleeve)

- a) Trade Mark
- b) Rated Voltage
- c) Nominal Capacitance
- d) Negative Polarity Direction
- e) Series
- f) Maximum Operating Temperature



(Example)

15. Others

Other characteristics are based on JIS C 5101-4.

16. Guide to application

Please refer to technical report EIAJ RCR-2367B "Guideline of notabilia for fixed aluminum electrolytic capacitors for use in electrolytic equipment".

(Technical Report of Electronic industries Association of Japan in march 1995, revised edition in march 2002.)

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