THE DATASHEET OF

LGG2W101MELZ25

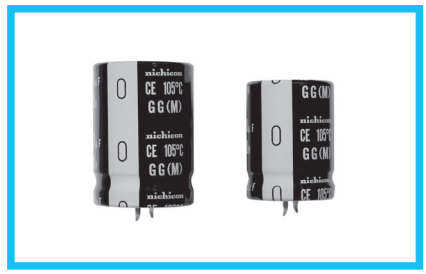
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

LGG

Snap-in Terminal Type, 105°C Ultra-Smaller-Sized

Smaller



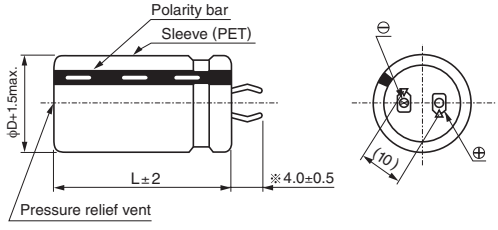
- One rank smaller case sized than LGN.
- Suited for equipment down sizing.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

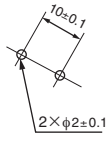
LGN
Smaller
LGG
Smaller
LGL

■Specifications

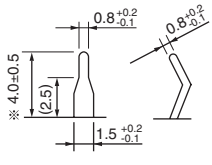
Item	Performance Characteristics
Category Temperature Range	– 40 to +105°C (160 to 250V) , – 25 to +105°C (400 to 450V)
Rated Voltage Range	160 to 450V
Rated Capacitance Range	100 to 3300μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	$I \leqq 3\sqrt{CV}$ (μA) (After 5 minutes' application of rated voltage at 20°C) [C : Rated Capacitance (μF) V : Voltage (V)]
Tangent of loss angle (tan δ)	Rated voltage (V): 160 to 420 / 450; tan δ (max.): 0.15 / 0.20. Measurement frequency : 120Hz at 20°C
Stability at Low Temperature	Rated voltage (V): 160 to 250 / 400 to 450; Impedance ratio (max.) Z(– 25°C) / Z(+20°C): 4 / 8. Measurement frequency : 120Hz
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 2000 hours at 105°C, the peak voltage shall not exceed the rated voltage. — Capacitance change: Within ±20% of the initial capacitance value; tan δ: 200% or less than the initial specified value; Leakage current: Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the characteristic requirements listed at right. — Capacitance change: Within ±20% of the initial capacitance value; tan δ: 200% or less than the initial specified value; Leakage current: Less than or equal to the initial specified value
Marking	Printed with white color letter on black sleeve.

■Drawing





(PC board hole dimensions)



(Terminal dimensions)

※ Other terminations available upon request.
Please refer to the Guidelines for Aluminum Electrolytic Capacitors.

Type numbering system (Example : 400V 180μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
L	G	G	2	G	1	8	1	M	E	L	A	2	5

Case length code
Case dia. code
Configuration
Capacitance tolerance (±20%)
Rated capacitance (180μF)
Rated voltage (400V)
Series name
Type

φD	Code
22	Z
25	A
30	B
35	C

● Dimension table in next page.

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■Dimensions

160V (2C)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
560	22 × 25	1400	0.89	LGG2C561MELZ25
680	22 × 30	1500	0.98	LGG2C681MELZ30
	25 × 25	1700	0.98	LGG2C681MELA25
820	22 × 35	2000	1.08	LGG2C821MELZ35
	25 × 30	2000	1.08	LGG2C821MELA30
1000	22 × 40	2100	1.20	LGG2C102MELZ40
	25 × 35	2200	1.20	LGG2C102MELA35
	30 × 25	2200	1.20	LGG2C102MELB25
1200	25 × 40	2300	1.31	LGG2C122MELA40
	30 × 30	2300	1.31	LGG2C122MELB30
	35 × 25	2300	1.31	LGG2C122MELC25
1500	25 × 45	2500	1.46	LGG2C152MELA45
	30 × 35	2500	1.46	LGG2C152MELB35
	35 × 30	2500	1.46	LGG2C152MELC30
1800	30 × 40	2700	1.60	LGG2C182MELB40
	35 × 30	2550	1.60	LGG2C182MELC30
2200	30 × 45	2900	1.77	LGG2C222MELB45
	35 × 35	2900	1.77	LGG2C222MELC35
2700	35 × 40	3000	1.97	LGG2C272MELC40
3300	35 × 45	3100	2.17	LGG2C332MELC45

180V (2Z)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
470	22 × 25	1300	0.87	LGG2Z471MELZ25
560	22 × 30	1500	0.95	LGG2Z561MELZ30
680	22 × 35	1700	1.04	LGG2Z681MELZ35
	25 × 30	1700	1.04	LGG2Z681MELA30
820	22 × 40	2000	1.15	LGG2Z821MELZ40
	25 × 35	2000	1.15	LGG2Z821MELA35
	30 × 25	2000	1.15	LGG2Z821MELB25
1000	22 × 45	2100	1.27	LGG2Z102MELZ45
	25 × 35	2050	1.27	LGG2Z102MELA35
	30 × 30	2200	1.27	LGG2Z102MELB30
1200	22 × 50	2150	1.39	LGG2Z122MELZ50
	25 × 40	2150	1.39	LGG2Z122MELA40
	30 × 35	2300	1.39	LGG2Z122MELB35
	35 × 25	2150	1.39	LGG2Z122MELC25
1500	25 × 50	2400	1.55	LGG2Z152MELA50
	30 × 40	2500	1.55	LGG2Z152MELB40
	35 × 30	2350	1.55	LGG2Z152MELC30
1800	30 × 45	2700	1.70	LGG2Z182MELB45
	35 × 35	2700	1.70	LGG2Z182MELC35
2200	30 × 50	2900	1.88	LGG2Z222MELB50
	35 × 40	2900	1.88	LGG2Z222MELC40
2700	35 × 45	3000	2.09	LGG2Z272MELC45
3300	35 × 50	3100	2.31	LGG2Z332MELC50

200V (2D)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
470	22 × 25	1200	0.91	LGG2D471MELZ25
560	22 × 30	1480	1.00	LGG2D561MELZ30
	25 × 25	1480	1.00	LGG2D561MELA25
680	22 × 35	1600	1.10	LGG2D681MELZ35
	25 × 30	1600	1.10	LGG2D681MELA30
820	22 × 40	1750	1.21	LGG2D821MELZ40
	25 × 35	1750	1.21	LGG2D821MELA35
	30 × 25	1750	1.21	LGG2D821MELB25
1000	22 × 45	2040	1.34	LGG2D102MELZ45
	25 × 40	2040	1.34	LGG2D102MELA40
	30 × 30	2040	1.34	LGG2D102MELB30
1200	25 × 45	2300	1.46	LGG2D122MELA45
	30 × 35	2300	1.46	LGG2D122MELB35
	35 × 25	2300	1.46	LGG2D122MELC25
1500	25 × 50	2570	1.64	LGG2D152MELA50
	30 × 40	2570	1.64	LGG2D152MELB40
	35 × 30	2570	1.64	LGG2D152MELC30
1800	30 × 45	2680	1.80	LGG2D182MELB45
	35 × 35	2680	1.80	LGG2D182MELC35
2200	30 × 50	2920	1.98	LGG2D222MELB50
	35 × 40	2920	1.98	LGG2D222MELC40
2700	35 × 45	3270	2.20	LGG2D272MELC45

220V (2P)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
330	22 × 25	1260	0.80	LGG2P331MELZ25
390	22 × 30	1340	0.87	LGG2P391MELZ30
470	22 × 35	1480	0.96	LGG2P471MELZ35
	25 × 25	1400	0.96	LGG2P471MELA25
560	22 × 35	1450	1.05	LGG2P561MELZ35
	25 × 30	1450	1.05	LGG2P561MELA30
680	22 × 40	1650	1.16	LGG2P681MELZ40
	25 × 35	1780	1.16	LGG2P681MELA35
	30 × 25	1650	1.16	LGG2P681MELB25
820	22 × 50	1930	1.27	LGG2P821MELZ50
	25 × 40	1930	1.27	LGG2P821MELA40
	30 × 30	1850	1.27	LGG2P821MELB30
	35 × 25	1930	1.27	LGG2P821MELC25
1000	25 × 45	2150	1.40	LGG2P102MELA45
	30 × 35	2330	1.40	LGG2P102MELB35
	35 × 30	2330	1.40	LGG2P102MELC30
1200	30 × 40	2500	1.54	LGG2P122MELB40
	35 × 30	2350	1.54	LGG2P122MELC30
1500	30 × 45	2550	1.72	LGG2P152MELB45
	35 × 35	2500	1.72	LGG2P152MELC35
1800	35 × 40	2700	1.88	LGG2P182MELC40
2200	35 × 50	2950	2.08	LGG2P222MELC50

Rated ripple current (mArms) at 105°C 120Hz

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■Dimensions

250V (2E)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
390	22 × 30	1200	0.93	LGG2E391MELZ30
	25 × 25	1200	0.93	LGG2E391MELA25
470	22 × 35	1300	1.02	LGG2E471MELZ35
	25 × 30	1300	1.02	LGG2E471MELA30
560	22 × 40	1400	1.12	LGG2E561MELZ40
	25 × 35	1500	1.12	LGG2E561MELA35
	30 × 25	1400	1.12	LGG2E561MELB25
680	22 × 45	1500	1.23	LGG2E681MELZ45
	25 × 40	1700	1.23	LGG2E681MELA40
	30 × 30	1700	1.23	LGG2E681MELB30
820	25 × 45	2000	1.35	LGG2E821MELA45
	30 × 35	2000	1.35	LGG2E821MELB35
	35 × 30	2000	1.35	LGG2E821MELC30
1000	25 × 50	2200	1.50	LGG2E102MELA50
	30 × 40	2200	1.50	LGG2E102MELB40
	35 × 30	2000	1.50	LGG2E102MELC30
1200	30 × 45	2300	1.64	LGG2E122MELB45
	35 × 35	2200	1.64	LGG2E122MELC35
1500	30 × 50	2300	1.83	LGG2E152MELB50
	35 × 40	2300	1.83	LGG2E152MELC40
1800	35 × 45	2500	2.01	LGG2E182MELC45

400V (2G)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
120	22 × 25	680	0.65	LGG2G121MELZ25
180	22 × 30	730	0.80	LGG2G181MELZ30
	25 × 25	730	0.80	LGG2G181MELA25
220	22 × 35	850	0.88	LGG2G221MELZ35
	25 × 30	850	0.88	LGG2G221MELA30
270	22 × 40	1000	0.98	LGG2G271MELZ40
	25 × 35	1000	0.98	LGG2G271MELA35
	30 × 25	1000	0.98	LGG2G271MELB25
330	22 × 50	1150	1.08	LGG2G331MELZ50
	25 × 40	1150	1.08	LGG2G331MELA40
	30 × 30	1150	1.08	LGG2G331MELB30
	35 × 25	1150	1.08	LGG2G331MELC25
390	25 × 45	1400	1.18	LGG2G391MELA45
	30 × 35	1400	1.18	LGG2G391MELB35
	35 × 30	1550	1.18	LGG2G391MELC30
470	25 × 50	1550	1.30	LGG2G471MELA50
	30 × 40	1550	1.30	LGG2G471MELB40
	35 × 30	1550	1.30	LGG2G471MELC30
560	30 × 45	1630	1.41	LGG2G561MELB45
	35 × 35	1630	1.41	LGG2G561MELC35
680	30 × 50	1800	1.56	LGG2G681MELB50
	35 × 40	1800	1.56	LGG2G681MELC40
820	35 × 45	2000	1.71	LGG2G821MELC45
1000	35 × 50	2140	1.89	LGG2G102MELC50

420V (W6)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
120	22 × 30	810	0.67	LGGW6121MELZ30
150	22 × 35	840	0.75	LGGW6151MELZ35
	25 × 25	820	0.75	LGGW6151MELA25
180	22 × 35	850	0.82	LGGW6181MELZ35
	25 × 30	910	0.82	LGGW6181MELA30
220	22 × 40	950	0.91	LGGW6221MELZ40
	25 × 35	1050	0.91	LGGW6221MELA35
	30 × 25	950	0.91	LGGW6221MELB25
270	22 × 50	1150	1.01	LGGW6271MELZ50
	25 × 40	1250	1.01	LGGW6271MELA40
	30 × 30	1250	1.01	LGGW6271MELB30
330	25 × 45	1350	1.11	LGGW6331MELA45
	30 × 35	1420	1.11	LGGW6331MELB35
	35 × 30	1420	1.11	LGGW6331MELC30
390	25 × 50	1450	1.21	LGGW6391MELA50
	30 × 40	1610	1.21	LGGW6391MELB40
	35 × 30	1450	1.21	LGGW6391MELC30
470	30 × 45	1860	1.33	LGGW6471MELB45
	35 × 35	1700	1.33	LGGW6471MELC35
560	35 × 40	1900	1.45	LGGW6561MELC40
680	35 × 45	2050	1.60	LGGW6681MELC45

450V (2W)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
100	22 × 25	640	0.63	LGG2W101MELZ25
120	22 × 30	690	0.69	LGG2W121MELZ30
	25 × 25	690	0.69	LGG2W121MELA25
150	22 × 35	720	0.77	LGG2W151MELZ35
	25 × 30	790	0.77	LGG2W151MELA30
180	22 × 40	790	0.85	LGG2W181MELZ40
	25 × 30	790	0.85	LGG2W181MELA30
220	22 × 45	870	0.94	LGG2W221MELZ45
	25 × 35	870	0.94	LGG2W221MELA35
	30 × 30	790	0.94	LGG2W221MELB30
270	22 × 50	1050	1.04	LGG2W271MELZ50
	25 × 40	1050	1.04	LGG2W271MELA40
	30 × 30	1050	1.04	LGG2W271MELB30
	35 × 25	1050	1.04	LGG2W271MELC25
330	25 × 50	1200	1.15	LGG2W331MELA50
	30 × 35	1200	1.15	LGG2W331MELB35
	35 × 30	1200	1.15	LGG2W331MELC30
390	30 × 40	1380	1.25	LGG2W391MELB40
	35 × 35	1380	1.25	LGG2W391MELC35
470	30 × 45	1550	1.37	LGG2W471MELB45
	35 × 40	1550	1.37	LGG2W471MELC40
560	35 × 45	1700	1.50	LGG2W561MELC45
680	35 × 50	1910	1.65	LGG2W681MELC50

Rated ripple current (mArms) at 105°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)		50	60	120	300	1k	10k	50k or more
Coeff.	160 to 250V	0.81	0.85	1.00	1.17	1.32	1.45	1.50
	400 to 450V	0.77	0.82	1.00	1.16	1.30	1.41	1.43

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