



**THE DATASHEET OF  
LGY1E123MELZ45**



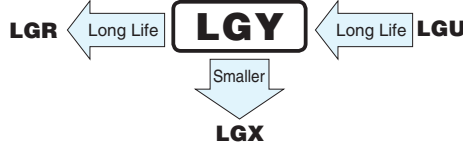
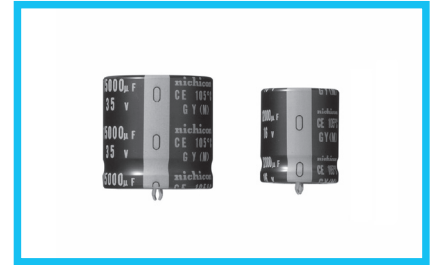
# LGY

Snap-in Terminal Type, 105°C Long Life Assurance



Long Life

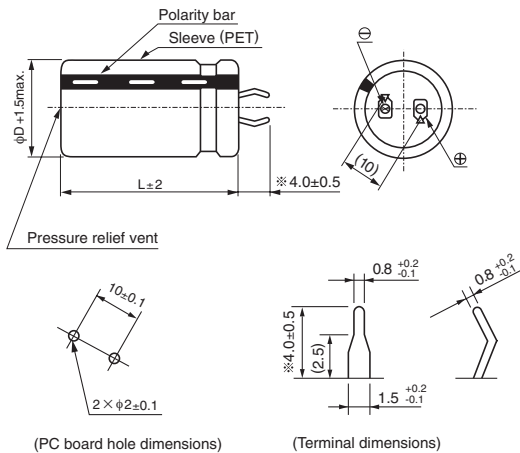
- Long life assurance series withstanding 5000 hours application of ripple current at 105°C.
- Suited for use in industrial power supplies applications where high reliability and dependable performance are the most important.
- Suited for ballast application.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



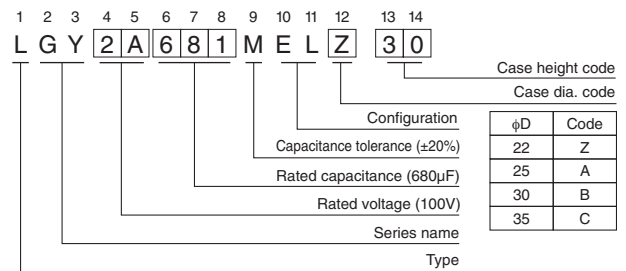
## Specifications

Item	Performance Characteristics						
Category Temperature Range	-40 to +105°C						
Rated Voltage Range	16 to 100V						
Rated Capacitance Range	560 to 47000μF						
Capacitance Tolerance	±20% at 120Hz, 20°C						
Leakage Current	$I \leq 3\sqrt{CV}$ (μA) (After 5 minutes' application of rated voltage at 20°C) [C : Rated Capacitance (μF) V : Voltage (V)]						
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C						
	Rated voltage (V)	16	25	35	50	63	80 · 100
	tan δ (max.)	0.50	0.40	0.35	0.30	0.25	0.20
Stability at Low Temperature	Measurement frequency : 120Hz						
	Rated voltage(V)	16 to 100					
	Impedance ratio (max.)	Z(-25°C) / Z(+20°C)		4			
		Z(-40°C) / Z(+20°C)		20			
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 5000 hours at 105°C, the peak voltage shall not exceed the rated voltage.		Capacitance change	Within ±25% of the initial capacitance value			
			tan δ	250% 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 requirements listed at right.		Capacitance change	Within ±15% of the initial capacitance value			
			tan δ	150% 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



## Type numbering system (Example : 100V 680μF)



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

## Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	300	1k	10k	50k or more
16 to 100V	0.88	0.90	1.00	1.07	1.15	1.15	1.15

● Dimension table in next page.

## LGY

### ■ Dimensions

16V (1C)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA <sub>rms</sub> )	Leakage Current (mA)	Code
6800	22 × 25	1800	0.98	LGY1C682MELZ25
8200	22 × 30	2000	1.08	LGY1C822MELZ30
10000	22 × 30	2200	1.20	LGY1C103MELZ30
	25 × 25	2200	1.20	LGY1C103MELA25
12000	22 × 35	2400	1.31	LGY1C123MELZ35
	25 × 30	2400	1.31	LGY1C123MELA30
	30 × 25	2400	1.31	LGY1C123MELB25
15000	22 × 40	2700	1.46	LGY1C153MELZ40
	25 × 35	2700	1.46	LGY1C153MELA35
	30 × 30	2700	1.46	LGY1C153MELB30
18000	22 × 50	3000	1.60	LGY1C183MELZ50
	25 × 40	3000	1.60	LGY1C183MELA40
	30 × 30	3000	1.60	LGY1C183MELB30
22000	25 × 45	3300	1.77	LGY1C223MELA45
	30 × 35	3300	1.77	LGY1C223MELB35
	35 × 30	3300	1.77	LGY1C223MELC30
27000	25 × 50	3600	1.97	LGY1C273MELA50
	30 × 40	3600	1.97	LGY1C273MELB40
	35 × 30	3600	1.97	LGY1C273MELC30
33000	30 × 45	4000	2.17	LGY1C333MELB45
	35 × 35	4000	2.17	LGY1C333MELC35
39000	30 × 50	4300	2.36	LGY1C393MELB50
	35 × 40	4300	2.36	LGY1C393MELC40
47000	35 × 45	4700	2.60	LGY1C473MELC45

25V (1E)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA <sub>rms</sub> )	Leakage Current (mA)	Code
4700	22 × 25	1600	1.02	LGY1E472MELZ25
5600	22 × 30	1800	1.12	LGY1E562MELZ30
6800	22 × 30	1900	1.23	LGY1E682MELZ30
	25 × 25	1900	1.23	LGY1E682MELA25
8200	22 × 35	2100	1.35	LGY1E822MELZ35
	25 × 30	2100	1.35	LGY1E822MELA30
	30 × 25	2100	1.35	LGY1E822MELB25
10000	22 × 40	2300	1.50	LGY1E103MELZ40
	25 × 35	2300	1.50	LGY1E103MELA35
	30 × 30	2300	1.50	LGY1E103MELB30
12000	22 × 45	2600	1.64	LGY1E123MELZ45
	25 × 40	2600	1.64	LGY1E123MELA40
	30 × 30	2600	1.64	LGY1E123MELB30
15000	25 × 45	2900	1.83	LGY1E153MELA45
	30 × 35	2900	1.83	LGY1E153MELB35
	35 × 30	2900	1.83	LGY1E153MELC30
18000	25 × 50	3100	2.01	LGY1E183MELA50
	30 × 40	3100	2.01	LGY1E183MELB40
	35 × 35	3100	2.01	LGY1E183MELC35
22000	30 × 45	3500	2.22	LGY1E223MELB45
	35 × 35	3500	2.22	LGY1E223MELC35
27000	35 × 45	3800	2.46	LGY1E273MELC45
33000	35 × 50	4200	2.72	LGY1E333MELC50

35V (1V)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA <sub>rms</sub> )	Leakage Current (mA)	Code
3300	22 × 25	1500	1.01	LGY1V332MELZ25
3900	22 × 30	1600	1.10	LGY1V392MELZ30
4700	22 × 35	1800	1.21	LGY1V472MELZ35
	25 × 25	1800	1.21	LGY1V472MELA25
5600	22 × 35	2000	1.32	LGY1V562MELZ35
	25 × 30	2000	1.32	LGY1V562MELA30
	30 × 25	2000	1.32	LGY1V562MELB25
6800	22 × 40	2200	1.46	LGY1V682MELZ40
	25 × 35	2200	1.46	LGY1V682MELA35
	30 × 25	2200	1.46	LGY1V682MELB25
8200	22 × 50	2400	1.60	LGY1V822MELZ50
	25 × 40	2400	1.60	LGY1V822MELA40
	30 × 30	2400	1.60	LGY1V822MELB30
10000	25 × 45	2600	1.77	LGY1V103MELA45
	30 × 35	2600	1.77	LGY1V103MELB35
12000	25 × 50	2900	1.94	LGY1V123MELA50
	30 × 40	2900	1.94	LGY1V123MELB40
	35 × 30	2900	1.94	LGY1V123MELC30
15000	30 × 45	3200	2.17	LGY1V153MELB45
	35 × 35	3200	2.17	LGY1V153MELC35
18000	35 × 40	3500	2.38	LGY1V183MELC40
22000	35 × 50	3900	2.63	LGY1V223MELC50

50V (1H)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA <sub>rms</sub> )	Leakage Current (mA)	Code
1800	22 × 25	1300	0.90	LGY1H182MELZ25
2200	22 × 25	1400	0.99	LGY1H222MELZ25
2700	22 × 30	1600	1.10	LGY1H272MELZ30
	25 × 25	1600	1.10	LGY1H272MELA25
3300	22 × 35	1800	1.21	LGY1H332MELZ35
	25 × 30	1800	1.21	LGY1H332MELA30
3900	22 × 40	1900	1.32	LGY1H392MELZ40
	25 × 30	1900	1.32	LGY1H392MELA30
	30 × 25	1900	1.32	LGY1H392MELB25
4700	22 × 45	2100	1.45	LGY1H472MELZ45
	25 × 35	2100	1.45	LGY1H472MELA35
	30 × 30	2100	1.45	LGY1H472MELB30
5600	22 × 50	2300	1.58	LGY1H562MELZ50
	25 × 40	2300	1.58	LGY1H562MELA40
	30 × 30	2300	1.58	LGY1H562MELB30
6800	25 × 45	2500	1.74	LGY1H682MELA45
	30 × 35	2500	1.74	LGY1H682MELB35
	35 × 30	2500	1.74	LGY1H682MELC30
8200	30 × 40	2800	1.92	LGY1H822MELB40
	35 × 35	2800	1.92	LGY1H822MELC35
10000	30 × 50	3100	2.12	LGY1H103MELB50
	35 × 40	3100	2.12	LGY1H103MELC40
12000	35 × 45	3400	2.32	LGY1H123MELC45
15000	35 × 50	3800	2.59	LGY1H153MELC50

Rated ripple current (mA<sub>rms</sub>) at 105°C 120Hz



## ■ Dimensions

63V (1J)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
1200	22 × 25	1300	0.82	LGY1J122MELZ25
1500	22 × 30	1500	0.92	LGY1J152MELZ30
	25 × 25	1500	0.92	LGY1J152MELA25
1800	22 × 30	1600	1.01	LGY1J182MELZ30
	25 × 25	1600	1.01	LGY1J182MELA25
2200	22 × 35	1800	1.11	LGY1J222MELZ35
	25 × 30	1800	1.11	LGY1J222MELA30
2700	22 × 40	2000	1.23	LGY1J272MELZ40
	25 × 35	2000	1.23	LGY1J272MELA35
	30 × 25	2000	1.23	LGY1J272MELB25
3300	22 × 45	2200	1.36	LGY1J332MELZ45
	25 × 35	2200	1.36	LGY1J332MELA35
	30 × 30	2200	1.36	LGY1J332MELB30
3900	25 × 40	2400	1.48	LGY1J392MELA40
	30 × 35	2400	1.48	LGY1J392MELB35
4700	25 × 50	2600	1.63	LGY1J472MELA50
	30 × 40	2600	1.63	LGY1J472MELB40
	35 × 30	2600	1.63	LGY1J472MELC30
5600	30 × 45	2800	1.78	LGY1J562MELB45
	35 × 35	2800	1.78	LGY1J562MELC35
6800	30 × 50	3100	1.96	LGY1J682MELB50
	35 × 40	3100	1.96	LGY1J682MELC40
8200	35 × 45	3400	2.15	LGY1J822MELC45
10000	35 × 50	3800	2.38	LGY1J103MELC50



80V (1K)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
820	22 × 25	1200	0.76	LGY1K821MELZ25
1000	22 × 25	1300	0.84	LGY1K102MELZ25
1200	22 × 30	1500	0.92	LGY1K122MELZ30
	25 × 25	1500	0.92	LGY1K122MELA25
1500	22 × 35	1600	1.03	LGY1K152MELZ35
	25 × 25	1600	1.03	LGY1K152MELA25
1800	22 × 35	1800	1.13	LGY1K182MELZ35
	25 × 30	1800	1.13	LGY1K182MELA30
	30 × 25	1800	1.13	LGY1K182MELB25
2200	22 × 45	2000	1.25	LGY1K222MELZ45
	25 × 35	2000	1.25	LGY1K222MELA35
	30 × 25	2000	1.25	LGY1K222MELB25
2700	25 × 40	2200	1.39	LGY1K272MELA40
	30 × 30	2200	1.39	LGY1K272MELB30
3300	25 × 45	2400	1.54	LGY1K332MELA45
	30 × 35	2400	1.54	LGY1K332MELB35
	35 × 30	2400	1.54	LGY1K332MELC30
3900	30 × 40	2600	1.67	LGY1K392MELB40
	35 × 30	2600	1.67	LGY1K392MELC30
4700	30 × 45	2900	1.83	LGY1K472MELB45
	35 × 35	2900	1.83	LGY1K472MELC35
5600	35 × 40	3100	2.00	LGY1K562MELC40
6800	35 × 45	3500	2.21	LGY1K682MELC45

100V (2A)				
Cap. (μF)	Size φD × L (mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
560	22 × 25	1100	0.70	LGY2A561MELZ25
680	22 × 30	1200	0.78	LGY2A681MELZ30
820	22 × 30	1300	0.85	LGY2A821MELZ30
	25 × 25	1300	0.85	LGY2A821MELA25
1000	22 × 35	1500	0.94	LGY2A102MELZ35
	25 × 30	1500	0.94	LGY2A102MELA30
1200	22 × 40	1600	1.03	LGY2A122MELZ40
	25 × 35	1600	1.03	LGY2A122MELA35
	30 × 25	1600	1.03	LGY2A122MELB25
1500	22 × 45	1800	1.16	LGY2A152MELZ45
	25 × 40	1800	1.16	LGY2A152MELA40
	30 × 30	1800	1.16	LGY2A152MELB30
1800	25 × 45	2000	1.27	LGY2A182MELA45
	30 × 35	2000	1.27	LGY2A182MELB35
2200	25 × 50	2200	1.40	LGY2A222MELA50
	30 × 40	2200	1.40	LGY2A222MELB40
	35 × 30	2200	1.40	LGY2A222MELC30
2700	30 × 45	2400	1.55	LGY2A272MELB45
	35 × 35	2400	1.55	LGY2A272MELC35
3300	30 × 50	2700	1.72	LGY2A332MELB50
	35 × 40	2700	1.72	LGY2A332MELC40
3900	35 × 45	2900	1.87	LGY2A392MELC45
4700	35 × 50	3200	2.05	LGY2A472MELC50

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

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