

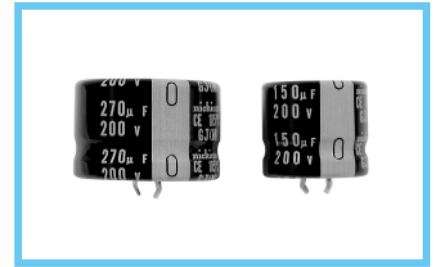
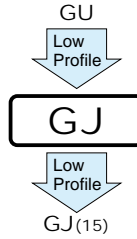
ALUMINUM ELECTROLYTIC CAPACITORS



Snap-in Terminal Type, Low-Profile Sized,
Wide Temperature Range
series



Smaller

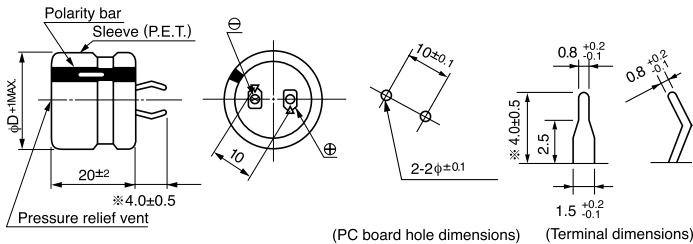


- Withstanding 3000 hours application of rated ripple current at 105°C.
- Ideally suited for flat design for switching power supply.
- Adapted to the RoHS directive (2002/95/EC).

Specifications

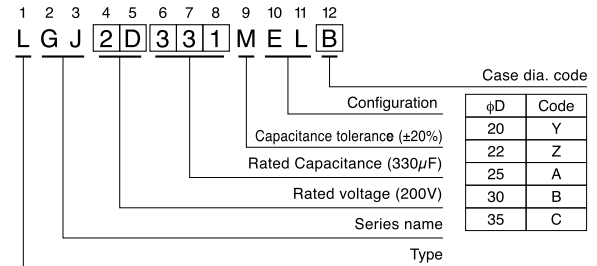
Item	Performance Characteristics									
Category Temperature Range	- 40 ~ +105°C (160 ~ 250V) , - 25 ~ +105°C (315 ~ 400V)									
Rated Voltage Range	160 ~ 400V									
Rated Capacitance Range	39 ~ 680µF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	$I \leq 3\sqrt{CV}$ (µA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (µF) V : Voltage (V)]									
tan δ	0.15 MAX. 120Hz 20°C									
Stability at Low Temperature	Measurement frequency : 120Hz									
	Rated voltage(V)									
	Impedance ratio ZT/Z20(MAX.)	<table border="1"> <tr> <td>Z - 25°C/Z+20°C</td> <td>160 ~ 250</td> <td>315 • 400</td> </tr> <tr> <td>Z - 40°C/Z+20°C</td> <td>3</td> <td>8</td> </tr> <tr> <td></td> <td>12</td> <td>—</td> </tr> </table>	Z - 25°C/Z+20°C	160 ~ 250	315 • 400	Z - 40°C/Z+20°C	3	8		12
Z - 25°C/Z+20°C	160 ~ 250	315 • 400								
Z - 40°C/Z+20°C	3	8								
	12	—								
Endurance	After an application of DC voltage (in the range of rated DC voltage even after over-lapping the specified ripple current) for 3000 hours at 105°C, capacitors meet the characteristic requirements listed at right.									
	Capacitance change	Within ±20% of initial value								
	tan δ	200% or less of initial specified value								
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the requirements listed at right.									
	Capacitance change	Within ±15% of initial value								
	tan δ	150% or less of initial specified value								
Leakage current	Initial specified value or less									
Marking	Printed with white color letter on black sleeve.									

Drawing



(PC board hole dimensions) (Terminal dimensions)

Type numbering system (Example : 200V 330µF)



※ The other terminal is also available upon request.
Please refer to page 237 for schematic of terminal dimensions.

Dimensions

Cap.(µF)	V(Code)		160V (2C)		180V (2Z)		200V (2D)		250V (2E)		315V (2F)		400V (2G)		
	Code														
39	390													20 × 20	0.32
47	470													22 × 20	0.37
56	560										20 × 20	0.38		25 × 20	0.40
68	680										22 × 20	0.45		25 × 20	0.46
82	820										22 × 20	0.47		30 × 20	0.55
100	101								20 × 20	0.51	25 × 20	0.56		30 × 20	0.60
120	121						20 × 20	0.56	22 × 20	0.60	30 × 20	0.65		35 × 20	0.75
150	151				20 × 20	0.62	22 × 20	0.73	25 × 20	0.74	30 × 20	0.70		35 × 20	0.80
180	181	20 × 20	0.68	22 × 20	0.80	22 × 20	0.80	25 × 20	0.75	35 × 20	0.85				
220	221	22 × 20	0.81	25 × 20	0.90	25 × 20	0.85	30 × 20	0.95	35 × 20	0.90				
270	271	25 × 20	0.98	25 × 20	0.95	30 × 20	1.05	30 × 20	1.00						
330	331	25 × 20	1.02	30 × 20	1.15	30 × 20	1.10	35 × 20	1.16						
390	391	30 × 20	1.25	30 × 20	1.20	35 × 20	1.30								
470	471	30 × 20	1.30	35 × 20	1.36	35 × 20	1.41								
560	561	35 × 20	1.46	35 × 20	1.43										
680	681	35 × 20	1.51											Case size φD × L (mm)	Rated ripple

Rated Ripple (Arms) at 105°C 120Hz

Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	300	1 k	10k~	50k~
160 ~ 250V	0.81	0.85	1.00	1.17	1.32	1.45	1.50
315 ~ 400V	0.77	0.82	1.00	1.16	1.30	1.41	1.43

Minimum order quantity : 50pcs.