

ALUMINUM ELECTROLYTIC CAPACITORS

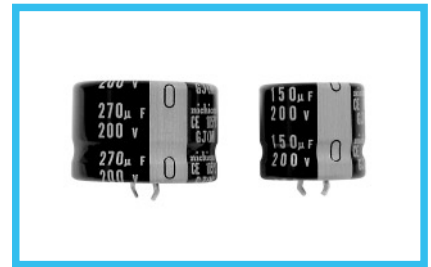
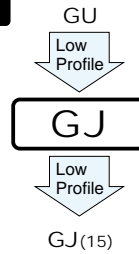


Snap-in Terminal Type, 105°C Low-Profile Sized

series



Smaller

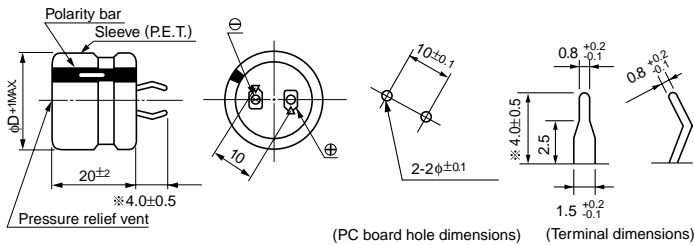


- Withstanding 3000 hours application of rated ripple current at 105°C.
- Ideally suited for flat design for switching power supply.
- Compliant to the RoHS directive (2002/95/EC).

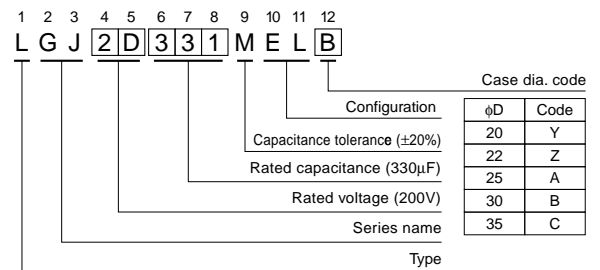
Specifications

Item	Performance Characteristics									
Category Temperature Range	- 40 to +105°C (160 to 250V) , - 25 to +105°C (315 to 400V)									
Rated Voltage Range	160 to 400V									
Rated Capacitance Range	39 to 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)]									
Tangent of loss angle (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 style="text-align: center;">Z - 25°C/Z+20°C</td> <td style="text-align: center;">160 to 250</td> <td style="text-align: center;">315 • 400</td> </tr> <tr> <td style="text-align: center;">Z - 40°C/Z+20°C</td> <td style="text-align: center;">3</td> <td style="text-align: center;">8</td> </tr> <tr> <td></td> <td style="text-align: center;">12</td> <td style="text-align: center;">—</td> </tr> </table>	Z - 25°C/Z+20°C	160 to 250	315 • 400	Z - 40°C/Z+20°C	3	8		12
Z - 25°C/Z+20°C	160 to 250	315 • 400								
Z - 40°C/Z+20°C	3	8								
	12	—								
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 3000 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								
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									
	Less than or equal to the initial specified value									
Marking	Printed with white color letter on black sleeve.									

Drawing



Type numbering system (Example : 200V 330µF)



※ The other terminal is also available upon request.
Please refer to page 265 for schematic of terminal dimensions.

Dimensions

Cap.(µF)	V(Code) Code	160V (2C)		180V (2Z)		200V (2D)		250V (2E)		315V (2F)		400V (2G)	
		φD	L	φD	L	φD	L	φD	L	φD	L	φD	L
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 current (Arms) at 105°C 120Hz

Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	300	1 k	10k	50k or more
160 to 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.