NIPPON CHEMI-CON

LARGE CAPACITANCE ALUMINUM ELECTROLYTIC CAPACITORS Inverter-use screw terminal, 85℃

RWL Series

- High ripple capability
- For train systems and high power consuming inverter circuits
- Endurance with ripple current : 20,000 hours at 85℃
- RoHS Compliant

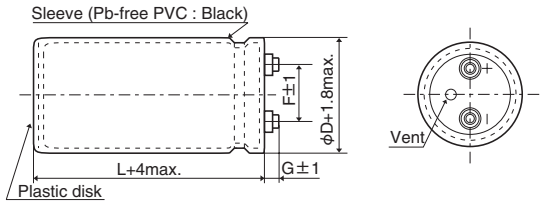
RWL
↑ Longer life
RWF P300

◆SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	-25 to +85℃	
Rated Voltage Range	350 to 450V_{dc}	
Capacitance Tolerance	±20% (M)	(at 20℃, 120Hz)
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)	(at 20℃ after 5 minutes)
Dissipation Factor (tan δ)	0.25 max.	(at 20℃, 120Hz)
Low Temperature Characteristics	Capacitance change C(-25℃)/C(+20℃)≧0.7	(at 120Hz)
Insulation Resistance	When measured between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V_{dc}, the insulation resistance shall not be less than 100MΩ.	
Insulation Withstanding Voltage	When a voltage of 2,000V_{ac} is applied for 1 minute between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 20,000 hours at 85℃.	
	Capacitance change	≦±30% of the initial value
	D.F. (tan δ)	≦300% of the initial specified value
	Leakage current	≦The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 500 hours at 85℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.	
	Capacitance change	≦±20% of the initial value
	D.F. (tan δ)	≦300% of the initial specified value
	Leakage current	≦The initial specified value

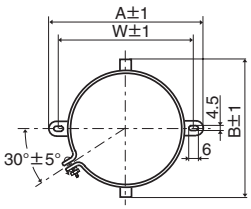
◆DIMENSIONS (Screw-Mount) [mm]

●Terminal Code : LG



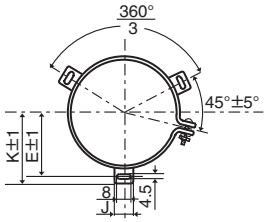
φ63.5 : G=6
φ76.2 & φ89 : G=5

●Mounting Clamp Code : B



φD	A	B	W	F
63.5	90.0	76.0	80.0	28.0
76.2	104.5	90.0	93.5	31.5

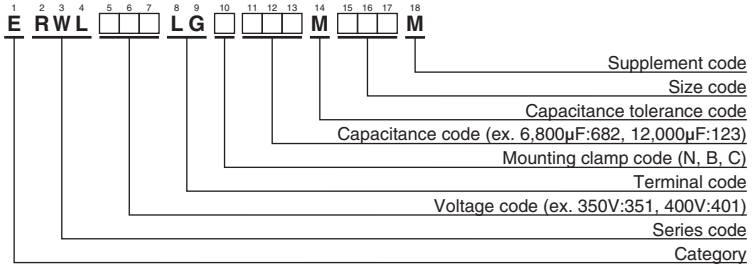
●Mounting Clamp Code : C



φD	E	K	F	J
63.5	38.1	43.5	28.0	14.0
76.2	44.5	50.0	31.5	14.0
89	50.8	56.5	31.5	16.0

<Screw specifcations>
Plus hexagon-headed screw :M5×0.8×10
Maximum screw tightening torque :3.23Nm
* The screw and the mounting clamp are separately supplied and not attached to the product.

◆PART NUMBERING SYSTEM



Please refer to "Product code guide (screw-mount terminal type)"

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RWL Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85℃, 120Hz)	Part No.
350	3,300	63.5 × 115	0.25	11.1	ERWL351LGC332MDB5M
	3,900	63.5 × 130	0.25	12.8	ERWL351LGC392MDD0M
	4,700	63.5 × 155	0.25	15.2	ERWL351LGC472MDF5M
	4,700	76.2 × 115	0.25	14.7	ERWL351LGC472MEB5M
	5,600	63.5 × 170	0.25	17.3	ERWL351LGC562MDH0M
	5,600	76.2 × 130	0.25	16.9	ERWL351LGC562MED0M
	6,800	63.5 × 190	0.25	20.0	ERWL351LGC682MDK0M
	6,800	76.2 × 155	0.25	20.2	ERWL351LGC682MEF5M
	8,200	76.2 × 170	0.25	23.1	ERWL351LGC822MEH0M
	10,000	89 × 155	0.25	26.6	ERWL351LGC103MFF5M
	12,000	89 × 190	0.25	32.0	ERWL351LGC123MFK0M
400	2,700	63.5 × 115	0.25	10.1	ERWL401LGC272MDB5M
	3,300	63.5 × 130	0.25	11.7	ERWL401LGC332MDD0M
	3,900	63.5 × 155	0.25	13.8	ERWL401LGC392MDF5M
	3,900	76.2 × 115	0.25	14.7	ERWL401LGC392MEB5M
	4,700	63.5 × 170	0.25	15.8	ERWL401LGC472MDH0M
	4,700	76.2 × 130	0.25	15.5	ERWL401LGC472MED0M

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85℃, 120Hz)	Part No.
400	5,600	63.5 × 190	0.25	18.2	ERWL401LGC562MDK0M
	5,600	76.2 × 155	0.25	18.3	ERWL401LGC562MEF5M
	6,800	76.2 × 170	0.25	21.0	ERWL401LGC682MEH0M
	8,200	89 × 155	0.25	24.1	ERWL401LGC822MFF5M
	10,000	89 × 190	0.25	29.1	ERWL401LGC103MFK0M
450	2,200	63.5 × 115	0.25	9.10	ERWL451LGC222MDB5M
	2,700	63.5 × 130	0.25	10.6	ERWL451LGC272MDD0M
	2,700	76.2 × 115	0.25	11.2	ERWL451LGC272MEB5M
	3,300	63.5 × 155	0.25	12.7	ERWL451LGC332MDF5M
	3,300	76.2 × 130	0.25	13.0	ERWL451LGC332MED0M
	3,900	63.5 × 170	0.25	14.4	ERWL451LGC392MDH0M
	4,700	76.2 × 155	0.25	16.7	ERWL451LGC472MEF5M
	5,600	76.2 × 190	0.25	20.1	ERWL451LGC562MEK0M
	5,600	89 × 155	0.25	19.9	ERWL451LGC562MFF5M
	6,800	89 × 170	0.25	23.0	ERWL451LGC682MFH0M
	8,200	89 × 190	0.25	26.4	ERWL451LGC822MFK0M

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency (Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.1	1.3	1 .4

Note : The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5 to 10℃ rise. When long life performance is required in actual use, the rms ripple current has to be reduced. Also, for RWL series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For details, please contact a representative of Nippon Chemi-Con.