### LARGE CAPACITANCE ALUMINUM ELECTROLYTIC CAPACITORS Inverter-use screw terminal, 85°C

RWL

Longer life

**BWF P300** 

Mounting Clamp Code : C

F J

14.0

# Series

• High ripple capability

• For train systems and high power consuming inverter circuits ● Endurance with ripple current : 20,000 hours at 85°C

RoHS Compliant

#### SPECIFICATIONS

Items	Characteristics						
Category Temperature Range	-25 to +85℃						
Rated Voltage Range	350 to 450V <sub>dc</sub>						
Capacitance Tolerance	±20% (M) (at 20°C, 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°C after 5 minutes)						
Dissipation Factor $(\tan \delta)$	0.25 max. (at 20°C, 120Hz)						
Low Temperature Characteristics	Capacitance change $C(-25^{\circ}C)/C(+20^{\circ}C) \ge 0.7$ (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 $100M\Omega$ .						
Insulation Withstanding Voltage	When a voltage of 2,000V <sub>ac</sub> 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°C 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°C.						
	Capacitance change	$\leq \pm 30\%$ 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°C after exposing them for 500 hours at 85°C 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	$\leq \pm 20\%$ of the initial value					
	D.F. (tan δ )	$\leq$ 300% of the initial specified value	]				
	Leakage current	≦The initial specified value					

Mounting Clamp Code : B

#### DIMENSIONS (Screw-Mount) [mm]

Terminal Code : LG



<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)"

# RWL<sub>Series</sub>

#### **♦STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85°C, 120Hz)	Part No.
	3,300	$63.5 \times 115$	0.25	11.1	ERWL351LGC332MDB5M		5,600	$63.5 \times 190$	0.25	18.2	ERWL401LGC562MDK0M
	3,900	$63.5 \times 130$	0.25	12.8	ERWL351LGC392MDD0M		5,600	$76.2 \times 155$	0.25	18.3	ERWL401LGC562MEF5M
	4,700	$63.5 \times 155$	0.25	15.2	ERWL351LGC472MDF5M	400	6,800	$76.2 \times 170$	0.25	21.0	ERWL401LGC682MEH0M
	4,700	76.2 × 115	0.25	14.7	ERWL351LGC472MEB5M		8,200	89 × 155	0.25	24.1	ERWL401LGC822MFF5M
	5,600	$63.5 \times 170$	0.25	17.3	ERWL351LGC562MDH0M		10,000	89 × 190	0.25	29.1	ERWL401LGC103MFK0M
350	5,600	$76.2 \times 130$	0.25	16.9	ERWL351LGC562MED0M		2,200	$63.5 \times 115$	0.25	9.10	ERWL451LGC222MDB5M
	6,800	$63.5 \times 190$	0.25	20.0	ERWL351LGC682MDK0M		2,700	$63.5 \times 130$	0.25	10.6	ERWL451LGC272MDD0M
	6,800	$76.2 \times 155$	0.25	20.2	ERWL351LGC682MEF5M		2,700	76.2 × 115	0.25	11.2	ERWL451LGC272MEB5M
	8,200	$76.2 \times 170$	0.25	23.1	ERWL351LGC822MEH0M		3,300	$63.5 \times 155$	0.25	12.7	ERWL451LGC332MDF5M
	10,000	89 × 155	0.25	26.6	ERWL351LGC103MFF5M		3,300	76.2 × 130	0.25	13.0	ERWL451LGC332MED0M
	12,000	89 × 190	0.25	32.0	ERWL351LGC123MFK0M	450	3,900	$63.5 \times 170$	0.25	14.4	ERWL451LGC392MDH0M
	2,700	$63.5 \times 115$	0.25	10.1	ERWL401LGC272MDB5M		4,700	$76.2 \times 155$	0.25	16.7	ERWL451LGC472MEF5M
	3,300	$63.5 \times 130$	0.25	11.7	ERWL401LGC332MDD0M		5,600	$76.2 \times 190$	0.25	20.1	ERWL451LGC562MEK0M
400	3,900	$63.5 \times 155$	0.25	13.8	ERWL401LGC392MDF5M		5,600	89 × 155	0.25	19.9	ERWL451LGC562MFF5M
400	3,900	76.2 × 115	0.25	14.7	ERWL401LGC392MEB5M		6,800	89 × 170	0.25	23.0	ERWL451LGC682MFH0M
	4,700	$63.5 \times 170$	0.25	15.8	ERWL401LGC472MDH0M		8,200	89 × 190	0.25	26.4	ERWL451LGC822MFK0M
	4,700	$76.2 \times 130$	0.25	15.5	ERWL401LGC472MED0M						

#### 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°C 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.

# **Mouser Electronics**

Authorized Distributor

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## United Chemi-Con (UCC):

ERWL351LGC682MDK0	M ERWL401LGC332MDD0	M ERWL401LGB392MEB5N	ERWL401LGB562AFA5M
ERWL451LGN842MFK0M	ERWL401LGC392MEB5M	ERWL401LGC272MDB5M	ERWL401LGC472MED0M
ERWL401LGC562MEF5M	ERWL401LGC682MEH0M	ERWL351LGN123MFK0M	ERWL451LGC222MDB5M
ERWL351LGC103MFF5M	ERWL401LGN103MFK0M	ERWL351LGN562MED0M	ERWL401LGC562MDK0M