RWF Series

- High ripple capability
- Endurance with ripple current : 5,000 hours at 85℃
- Wide range of case sizes from φ50 to φ100
- RoHS2 Compliant

RWE → RWF → RWH
Longer life — Downsized, Higher ripple current

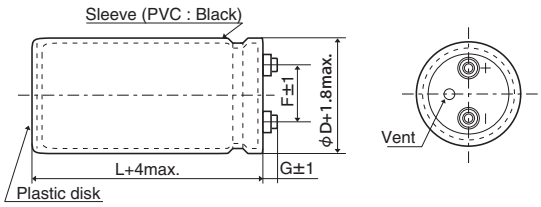


◆SPECIFICATIONS

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 5,000 hours at 85℃.	
	Capacitance change	≦±20% of the initial value
	D.F. (tan δ)	≦200% 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)	≦200% of the initial specified value
	Leakage current	≦The initial specified value

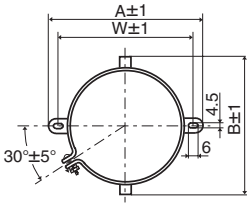
◆DIMENSIONS (Screw-Mount) [mm]

●Terminal Code : LG



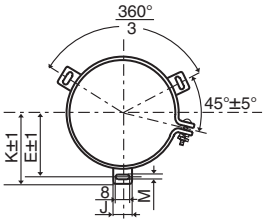
φ50 & φ63.5 : G=6
φ76.2 & φ89 : G=5
φ100 : G=10

●Mounting Clamp Code : B



φD	A	B	W	F
50	78.0	64.0	68.0	22.4
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	M	F	J
50	32.5	37.0	4.5	22.4	14.0
63.5	38.1	43.5	4.5	28.0	14.0
76.2	44.5	50.0	4.5	31.5	14.0
89	50.8	56.5	4.5	31.5	16.0
100	56.5	63.4	5.5	41.5	18.0

<Screw specifications>
to φ89 Plus hexagon-headed screw :M5×0.8×10
Maximum screw tightening torque :3.23Nm

φ100 Cross-recessed head (phillips) screw : M8×1.25×16
Spring washer,Washer
Maximum screw tightening torque :6.31Nm

* The screw and the mounting clamp are separately supplied and not attached to the product.

◆PART NUMBERING SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
E	R	W	F				L	G					M				U

Supplement code
Size code
Capacitance tolerance code
Capacitance code (ex. 6,800μF:682, 12,000μF:123)
Mounting clamp code (N, B, C)
Terminal code
Voltage code (ex. 350V:351, 400V:401)
Series code
Category

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

Product specifications in this catalog are subject to change without notice.Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

RWF Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85℃, 120Hz)	Part No.
350	1,200	50 × 60	0.25	4.90	ERWF351LGC122MC60U
	1,800	50 × 75	0.25	6.50	ERWF351LGC182MC75U
	2,200	50 × 85	0.25	7.50	ERWF351LGC222MC85U
	2,200	50 × 96	0.25	7.70	ERWF351LGC222MC96U
	2,700	50 × 115	0.25	9.30	ERWF351LGC272MCB5U
	3,300	50 × 130	0.25	10.8	ERWF351LGC332MCD0U
	3,900	63.5 × 115	0.25	12.1	ERWF351LGC392MDB5U
	4,700	63.5 × 130	0.25	14.0	ERWF351LGC472MDD0U
	5,600	63.5 × 155	0.25	16.6	ERWF351LGC562MDF5U
	5,600	76.2 × 115	0.25	16.1	ERWF351LGC562MEB5U
	6,800	63.5 × 190	0.25	20.0	ERWF351LGC682MDK0U
	6,800	76.2 × 130	0.25	18.6	ERWF351LGC682MED0U
	8,200	76.2 × 155	0.25	22.2	ERWF351LGC822MEF5U
	10,000	76.2 × 170	0.25	25.2	ERWF351LGC103MEH0U
	12,000	89 × 155	0.25	29.1	ERWF351LGC123MFF5U
	15,000	89 × 190	0.25	35.7	ERWF351LGC153MFK0U
	18,000	100 × 190	0.25	36.9	ERWF351LGC183MGK0U
	22,000	100 × 250	0.25	46.1	ERWF351LGC223MGR0U
400	1,000	50 × 60	0.25	4.40	ERWF401LGC102MC60U
	1,500	50 × 75	0.25	5.90	ERWF401LGC152MC75U
	1,800	50 × 85	0.25	6.80	ERWF401LGC182MC85U
	1,800	50 × 96	0.25	7.00	ERWF401LGC182MC96U
	2,200	50 × 105	0.25	8.00	ERWF401LGC222MCA5U
	2,700	50 × 130	0.25	9.80	ERWF401LGC272MCD0U
	3,300	63.5 × 115	0.25	11.1	ERWF401LGC332MDB5U
	3,900	63.5 × 130	0.25	12.7	ERWF401LGC392MDD0U
	4,700	63.5 × 155	0.25	15.2	ERWF401LGC472MDF5U
	4,700	76.2 × 115	0.25	14.7	ERWF401LGC472MEB5U

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	ERWF401LGC562MDK0U
	5,600	76.2 × 130	0.25	16.9	ERWF401LGC562MED0U
	6,800	76.2 × 155	0.25	20.2	ERWF401LGC682MEF5U
	8,200	76.2 × 170	0.25	22.8	ERWF401LGC822MEH0U
	10,000	89 × 155	0.25	26.6	ERWF401LGC103MFF5U
	12,000	89 × 170	0.25	30.0	ERWF401LGC123MFH0U
	15,000	100 × 190	0.25	33.7	ERWF401LGC153MGK0U
	18,000	100 × 220	0.25	37.4	ERWF401LGC183MGN0U
450	820	50 × 60	0.25	4.00	ERWF451LGC821MC60U
	1,000	50 × 75	0.25	4.80	ERWF451LGC102MC75U
	1,200	50 × 85	0.25	5.60	ERWF451LGC122MC85U
	1,200	50 × 96	0.25	5.70	ERWF451LGC122MC96U
	1,500	50 × 96	0.25	6.30	ERWF451LGC152MC96U
	1,800	50 × 115	0.25	7.60	ERWF451LGC182MCB5U
	2,200	50 × 130	0.25	8.80	ERWF451LGC222MCD0U
	2,700	63.5 × 115	0.25	10.1	ERWF451LGC272MDB5U
	3,300	63.5 × 130	0.25	11.7	ERWF451LGC332MDD0U
	3,900	63.5 × 155	0.25	13.8	ERWF451LGC392MDF5U
	3,900	76.2 × 115	0.25	13.4	ERWF451LGC392MEB5U
	4,700	63.5 × 190	0.25	16.7	ERWF451LGC472MDK0U
	4,700	76.2 × 130	0.25	15.5	ERWF451LGC472MED0U
	5,600	76.2 × 155	0.25	18.3	ERWF451LGC562MEF5U
	6,800	76.2 × 170	0.25	20.7	ERWF451LGC682MEH0U
	8,200	89 × 155	0.25	24.1	ERWF451LGC822MFF5U
	10,000	89 × 170	0.25	27.8	ERWF451LGC103MFH0U
	12,000	100 × 190	0.25	29.3	ERWF451LGC123MGK0U
	15,000	100 × 250	0.25	37.0	ERWF451LGC153MGR0U

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency (Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.1	1.3	1.4

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.
Also, for the RWF 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.

Product specifications in this catalog are subject to change without notice.Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

■ Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.

■ Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.

■ The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.

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In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

Part Numbering System
Part Numbering System (Appendix)
Standardization
Available Items by Manufacturing Locations
Environmental Measures
Technical Note
Precautions and Guidelines
Recommended Soldering Conditions
Taping, Lead-preforming and Packaging
Available Terminals for Snap-in and Screw Mount Type

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