

# RWF Series

- High ripple capability
- Endurance with ripple current : 5,000 hours at 85°C
- Wide range of case sizes from  $\phi$  50 to  $\phi$  100
- RoHS2 Compliant

RWH ← RWF ← RWE  
Downsized Longer life  
Higher ripple current

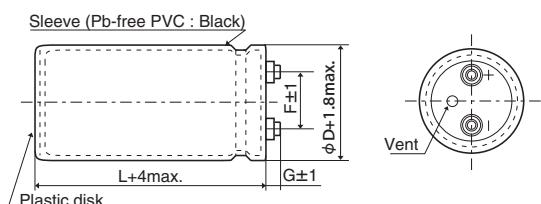


## ◆SPECIFICATIONS

Items	Characteristics	
Category		
Temperature Range	-25 to +85°C	
Rated Voltage Range	350 to 450V <sub>dc</sub>	
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)	
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current ( $\mu$ A), C : Nominal capacitance ( $\mu$ F), 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 $C(-25^\circ\text{C})/C(+20^\circ\text{C}) \geq 0.7$ (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 <sub>dc</sub> , 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 5,000 hours at 85°C. Capacitance change $\leq \pm 20\%$ of the initial value D.F. (tan $\delta$ ) $\leq 200\%$ of the initial specified value Leakage current $\leq$ 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 $\delta$ ) $\leq 200\%$ of the initial specified value Leakage current $\leq$ The initial specified value	

## ◆DIMENSIONS (Screw-Mount) [mm]

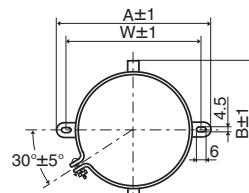
### ●Terminal Code : LG



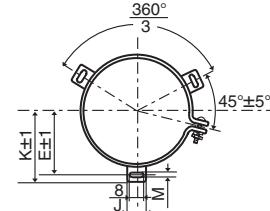
<Screw specifications>

to  $\phi 89$  Plus hexagon-headed screw : M5×0.8×10  
Maximum screw tightening torque : 3.23Nm

### ●Mounting Clamp Code : B



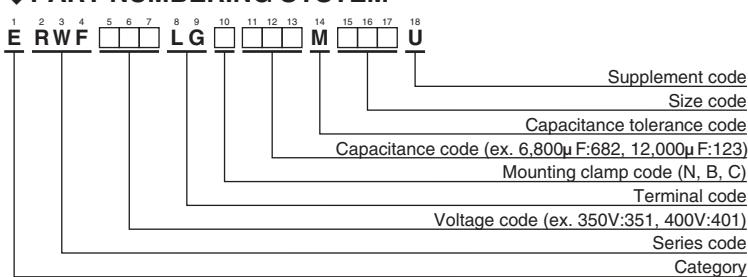
### ●Mounting Clamp Code : C



$\phi 100$  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



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

## RWF Series

## ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap ( $\mu$ F)	Case size $\phi$ D×L(mm)	tan $\delta$	Rated ripple current (Arms/ 85°C, 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 <sub>dc</sub> )	Cap ( $\mu$ F)	Case size $\phi$ D×L(mm)	tan $\delta$	Rated ripple current (Arms/ 85°C, 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
	820	50 × 60	0.25	4.00	ERWF451LGC821MC60U
	1,000	50 × 75	0.25	4.80	ERWF451LGC102MC75U
450	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

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 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.