

# RWG Series

- Downsized, high ripple version of RWF series
- 20% better ripple current at 300Hz than RWF series
- Endurance with ripple current : 5,000 hours at 85°C
- RoHS Compliant

RWG

↓  
Downsized  
RWF P294



## SPECIFICATIONS

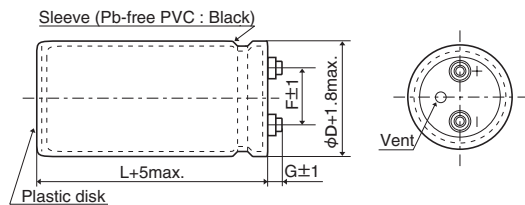
Items	Characteristics						
Category							
Temperature Range	-25 to +85°C						
Rated Voltage Range	350 to 450V <sub>dc</sub>						
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)						
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)						
Dissipation Factor (tan δ)	0.25 max. (at 20°C, 120Hz)						
Low Temperature Characteristics	Capacitance change $C(-25°C)/C(+20°C) \geq 0.7$ (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 100MΩ.						
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. <table border="1" style="width: 100%;"> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>D.F. (tan δ)</td> <td>≤ 200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </table>	Capacitance change	≤ ±20% of the initial value	D.F. (tan δ)	≤ 200% of the initial specified value	Leakage current	≤ The initial specified value
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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°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. <table border="1" style="width: 100%;"> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>D.F. (tan δ)</td> <td>≤ 200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </table>	Capacitance change	≤ ±20% of the initial value	D.F. (tan δ)	≤ 200% of the initial specified value	Leakage current	≤ The initial specified value
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## DIMENSIONS (Screw-Mount) [mm]

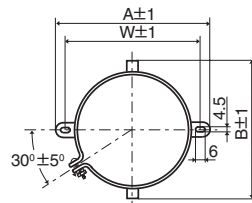
● Terminal Code : LG

● Mounting Clamp Code : B

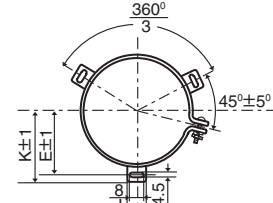
● Mounting Clamp Code : C



- φ50 : G=6
- φ63.5, φ76.2 : G=5
- φ89 : G=4



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



φD	E	K	F	J
50	32.5	37.0	22.4	14.0
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

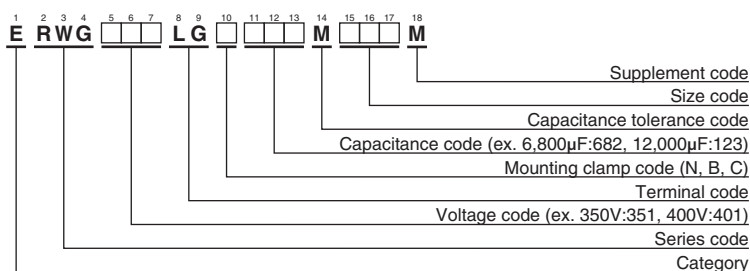
<Screw specifications>

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)"

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/85°C)		Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/85°C)		Part No.	
				120Hz	300Hz						120Hz	300Hz		
350	2,200	50 × 96	0.25	7.70	9.20	ERWG351LGC222MC96M	400	6,800	63.5 × 190	0.25	20.6	24.7	ERWG401LGC682MDK0M	
	2,700	50 × 105	0.25	8.90	10.6	ERWG351LGC272MCA5M		6,800	76.2 × 130	0.25	19.2	23.0	ERWG401LGC682MED0M	
	3,300	50 × 115	0.25	10.3	12.3	ERWG351LGC332MCB5M		8,200	76.2 × 155	0.25	22.7	27.2	ERWG401LGC822MEF5M	
	3,900	50 × 130	0.25	11.8	14.1	ERWG351LGC392MCD0M		10,000	76.2 × 170	0.25	26.2	31.4	ERWG401LGC103MEH0M	
	4,700	63.5 × 115	0.25	13.6	16.3	ERWG351LGC472MDB5M		12,000	89 × 155	0.25	30.0	36.0	ERWG401LGC123MFF5M	
	5,600	63.5 × 130	0.25	15.7	18.8	ERWG351LGC562MDD0M		12,000	89 × 170	0.25	31.3	37.5	ERWG401LGC123MFH0M	
	6,800	63.5 × 155	0.25	18.8	22.5	ERWG351LGC682MDF5M		15,000	89 × 190	0.25	36.7	44.0	ERWG401LGC153MFK0M	
	6,800	76.2 × 115	0.25	18.2	21.8	ERWG351LGC682MEB5M		450	1,500	50 × 96	0.25	6.40	7.60	ERWG451LGC152MC96M
	8,200	63.5 × 190	0.25	22.6	27.1	ERWG351LGC822MDK0M			1,800	50 × 105	0.25	7.30	8.70	ERWG451LGC182MCA5M
	8,200	76.2 × 130	0.25	21.0	25.2	ERWG351LGC822MED0M			2,200	50 × 115	0.25	8.40	10.0	ERWG451LGC222MCB5M
	10,000	76.2 × 155	0.25	25.1	30.1	ERWG351LGC103MEF5M			2,700	50 × 130	0.25	9.80	11.7	ERWG451LGC272MCD0M
	12,000	76.2 × 170	0.25	28.7	34.4	ERWG351LGC123MEH0M			3,300	63.5 × 115	0.25	11.4	13.6	ERWG451LGC332MDB5M
	15,000	89 × 155	0.25	33.6	40.3	ERWG351LGC153MFF5M			3,900	63.5 × 130	0.25	13.1	15.7	ERWG451LGC392MDD0M
	15,000	89 × 170	0.25	35.0	42.0	ERWG351LGC153MFH0M			4,700	63.5 × 155	0.25	15.6	18.7	ERWG451LGC472MDF5M
18,000	89 × 190	0.25	40.3	48.3	ERWG351LGC183MFK0M	4,700	76.2 × 115		0.25	15.1	18.1	ERWG451LGC472MEB5M		
400	1,800	50 × 96	0.25	7.00	8.40	ERWG401LGC182MC96M	5,600		63.5 × 190	0.25	18.7	22.4	ERWG451LGC562MDK0M	
	2,200	50 × 105	0.25	8.10	9.70	ERWG401LGC222MCA5M	5,600		76.2 × 130	0.25	17.4	20.8	ERWG451LGC562MED0M	
	2,700	50 × 115	0.25	9.30	11.1	ERWG401LGC272MCB5M	6,800		76.2 × 155	0.25	20.7	24.8	ERWG451LGC682MEF5M	
	3,300	50 × 130	0.25	10.9	13.0	ERWG401LGC332MCD0M	8,200		76.2 × 170	0.25	23.7	28.4	ERWG451LGC822MEH0M	
	3,900	63.5 × 115	0.25	12.4	14.8	ERWG401LGC392MDB5M	10,000		89 × 155	0.25	27.4	32.8	ERWG451LGC103MFF5M	
	4,700	63.5 × 130	0.25	14.4	17.2	ERWG401LGC472MDD0M	10,000		89 × 170	0.25	28.6	34.3	ERWG451LGC103MFH0M	
	5,600	63.5 × 155	0.25	17.0	20.4	ERWG401LGC562MDF5M	12,000	89 × 190	0.25	32.9	39.4	ERWG451LGC123MFK0M		
	5,600	76.2 × 115	0.25	16.5	19.8	ERWG401LGC562MEB5M								

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Frequency (Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.2	1.4	1.5

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 RWG 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.