

RWQ Series

- Downsized and high ripple current from RWE series
- Endurance with ripple current : 2,000 hours at 85°C
- RoHS Compliant

RWQ

↓
Downsized
RWE P300

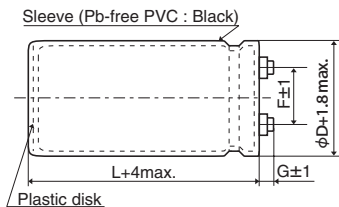


◆ SPECIFICATIONS

Items	Characteristics		
Category	-25 to +85°C		
Temperature Range	-25 to +85°C		
Rated Voltage Range	350 to 550V _{dc}		
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 _{dc}) (at 20°C after 5 minutes)		
Dissipation Factor (tan δ)	0.25 max. (at 20°C, 120Hz)		
Low Temperature Characteristics	Rated voltage (V _{dc})	350 to 450V	500 to 550V
	C(-25°C) / C(+20°C)	≥0.7	≥0.6
Insulation Resistance	When measured between the terminals shorted each other and 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 shorted each other and 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 2,000 hours at 85°C.		
	Capacitance change	≤ ±20% 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 JISC 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	

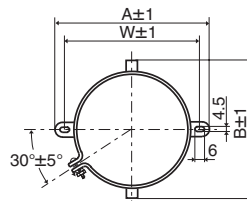
◆ DIMENSIONS (Screw-Mount) [mm]

● Terminal Code : LG



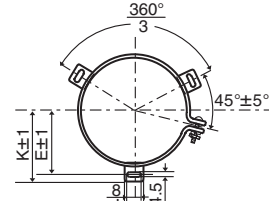
φ50 & φ63.5 : G=6
φ76.2 & φ89 : G=5

● 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	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

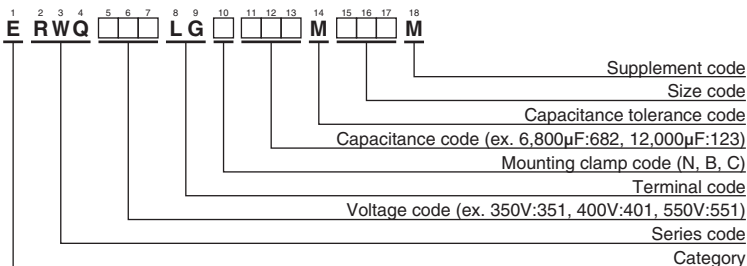
<Screw specifications>

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 _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/85°C, 120Hz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/85°C, 120Hz)	Part No.
350	1,500	50 × 65	0.25	5.09	ERWQ351LGC152MC65M	500	470	50 × 60	0.25	2.17	ERWQ501LGC471MC60M
	1,800	50 × 75	0.25	5.93	ERWQ351LGC182MC75M		680	50 × 65	0.25	2.70	ERWQ501LGC681MC65M
	2,200	50 × 96	0.25	7.30	ERWQ351LGC222MC96M		820	50 × 75	0.25	3.15	ERWQ501LGC821MC75M
	2,700	50 × 115	0.25	8.76	ERWQ351LGC272MCB5M		1,000	50 × 85	0.25	3.67	ERWQ501LGC102MC85M
	3,300	63.5 × 85	0.25	9.71	ERWQ351LGC332MD85M		1,200	50 × 96	0.25	4.22	ERWQ501LGC122MC96M
	3,900	50 × 130	0.25	11.1	ERWQ351LGC392MCD0M		1,500	50 × 115	0.25	5.14	ERWQ501LGC152MCB5M
	3,900	63.5 × 96	0.25	11.1	ERWQ351LGC392MD96M		1,500	63.5 × 96	0.25	5.42	ERWQ501LGC152MD96M
	4,700	63.5 × 115	0.25	13.2	ERWQ351LGC472MDB5M		1,800	50 × 130	0.25	5.95	ERWQ501LGC182MCD0M
	5,600	63.5 × 130	0.25	15.2	ERWQ351LGC562MDD0M		1,800	63.5 × 96	0.25	5.94	ERWQ501LGC182MD96M
	5,600	76.2 × 96	0.25	14.3	ERWQ351LGC562ME96M		2,200	63.5 × 115	0.25	7.10	ERWQ501LGC222MDB5M
	6,800	76.2 × 115	0.25	17.0	ERWQ351LGC682MEB5M		2,200	76.2 × 96	0.25	7.30	ERWQ501LGC222ME96M
	8,200	76.2 × 130	0.25	19.6	ERWQ351LGC822MED0M		2,700	63.5 × 130	0.25	8.31	ERWQ501LGC272MDD0M
	10,000	76.2 × 155	0.25	23.4	ERWQ351LGC103MEF5M		3,300	76.2 × 115	0.25	9.65	ERWQ501LGC332MEB5M
12,000	89 × 130	0.25	24.1	ERWQ351LGC123MFD0M	3,900	76.2 × 130	0.25	11.1	ERWQ501LGC392MED0M		
15,000	89 × 155	0.25	29.1	ERWQ351LGC153MFF5M	4,700	76.2 × 155	0.25	13.1	ERWQ501LGC472MEF5M		
400	1,200	50 × 65	0.25	4.55	ERWQ401LGC122MC65M	550	390	50 × 60	0.25	1.98	ERWQ551LGC391MC60M
	1,500	50 × 75	0.25	5.41	ERWQ401LGC152MC75M		560	50 × 65	0.25	2.45	ERWQ551LGC561MC65M
	1,800	50 × 85	0.25	6.26	ERWQ401LGC182MC85M		680	50 × 75	0.25	2.87	ERWQ551LGC681MC75M
	2,200	50 × 96	0.25	7.30	ERWQ401LGC222MC96M		820	50 × 85	0.25	3.32	ERWQ551LGC821MC85M
	2,700	50 × 115	0.25	8.76	ERWQ401LGC272MCB5M		1,200	50 × 115	0.25	4.60	ERWQ551LGC122MCB5M
	3,300	63.5 × 96	0.25	10.2	ERWQ401LGC332MD96M		1,500	63.5 × 96	0.25	5.42	ERWQ551LGC152MD96M
	3,900	63.5 × 115	0.25	12.0	ERWQ401LGC392MDB5M		1,800	76.2 × 80	0.25	6.12	ERWQ551LGC182ME80M
	4,700	63.5 × 130	0.25	13.9	ERWQ401LGC472MDD0M		2,200	76.2 × 96	0.25	7.30	ERWQ551LGC222ME96M
	4,700	76.2 × 96	0.25	13.1	ERWQ401LGC472ME96M		2,700	76.2 × 115	0.25	8.73	ERWQ551LGC272MEB5M
	5,600	63.5 × 155	0.25	16.5	ERWQ401LGC562MDF5M		3,300	76.2 × 130	0.25	10.2	ERWQ551LGC332MED0M
	6,800	76.2 × 115	0.25	17.0	ERWQ401LGC682MEB5M		5,600	89 × 155	0.25	14.5	ERWQ551LGC562MFF5M
	8,200	76.2 × 155	0.25	21.2	ERWQ401LGC822MEF5M						
	10,000	89 × 130	0.25	22.0	ERWQ401LGC103MFD0M						
12,000	89 × 155	0.25	26.0	ERWQ401LGC123MFF5M							
450	1,000	50 × 70	0.25	3.87	ERWQ451LGC102MC70M						
	1,200	50 × 75	0.25	4.36	ERWQ451LGC122MC75M						
	1,500	50 × 90	0.25	5.28	ERWQ451LGC152MC90M						
	1,800	50 × 96	0.25	5.95	ERWQ451LGC182MC96M						
	2,200	50 × 130	0.25	7.54	ERWQ451LGC222MCD0M						
	2,700	63.5 × 96	0.25	8.34	ERWQ451LGC272MD96M						
	3,300	63.5 × 115	0.25	9.97	ERWQ451LGC332MDB5M						
	3,900	63.5 × 130	0.25	11.4	ERWQ451LGC392MDD0M						
	3,900	76.2 × 96	0.25	11.1	ERWQ451LGC392ME96M						
	4,700	63.5 × 155	0.25	13.6	ERWQ451LGC472MDF5M						
	4,700	76.2 × 115	0.25	13.2	ERWQ451LGC472MEB5M						
	5,600	76.2 × 130	0.25	15.2	ERWQ451LGC562MED0M						
	6,800	76.2 × 155	0.25	18.1	ERWQ451LGC682MEF5M						
8,200	89 × 130	0.25	19.2	ERWQ451LGC822MFD0M							

◆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 shorted 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 RWQ series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For the details, please contact a representative of Nippon Chemi-Con.