

RHASeries

- Realized higher voltage than RWF series (500 to 650V_{dc})
- Endurance with ripple current : 5,000 hours at 85°C
- Suitable for high voltage inverter
- RoHS compliant

RHA
↑
Higher voltage
RWF P302

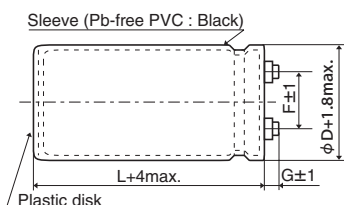


SPECIFICATIONS

Items	Characteristics						
Category							
Temperature Range	-25 to +85°C						
Rated Voltage Range	500 to 650V _{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) (at 20°C after 5 minutes)						
Dissipation Factor (tan δ)	0.25 max. (at 20°C, 120Hz)						
Low Temperature Characteristics	Capacitance change $C(-25^{\circ}\text{C})/C(+20^{\circ}\text{C}) \geq 0.6$ (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°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"> <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"> <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

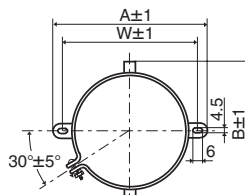


φ50 & φ63.5 : G=6
φ76.2 & φ89 : G=5
φ100 : G=10

<Screw specifications>

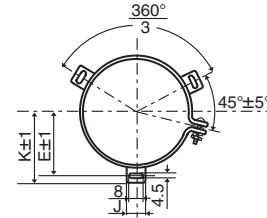
to φ89 Plus hexagon-headed screw : M5×0.8×10
Maximum screw tightening torque : 3.23Nm

● 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

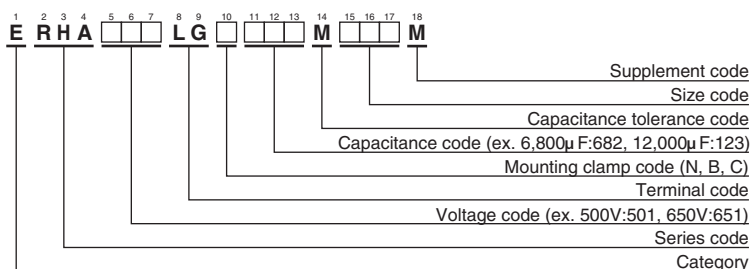


φD	E	K	F	J
50	32.5	37.0	22.4	14.0
63.5	38.1	43.5	28.0	14.0
76.2	44.5	50.0	31.5	14.0
89	50.8	56.5	31.5	16.0
100	56.5	63.4	41.5	18.0

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



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.
500	1,200	50×95	0.25	5.90	ERHA501LGC122MC95M	550	5,600	89×150	0.25	18.2	ERHA551LGC562MFF0M
	1,500	50×115	0.25	7.20	ERHA501LGC152MCB5M		6,800	89×170	0.25	21.1	ERHA551LGC682MFH0M
	1,800	50×130	0.25	8.30	ERHA501LGC182MCD0M		8,200	100×170	0.25	24.8	ERHA551LGC822MGH0M
	2,200	50×150	0.25	9.80	ERHA501LGC222MCF0M		10,000	100×200	0.25	29.4	ERHA551LGC103MGL0M
	2,700	63.5×120	0.25	11.2	ERHA501LGC272MDC0M	600	1,200	63.5×95	0.25	6.70	ERHA601LGC122MD95M
	3,300	63.5×140	0.25	13.3	ERHA501LGC332MDE0M		1,500	63.5×110	0.25	8.00	ERHA601LGC152MDB0M
	3,900	63.5×170	0.25	15.7	ERHA501LGC392MDH0M		1,800	63.5×125	0.25	9.30	ERHA601LGC182MDC5M
	3,900	76.2×130	0.25	15.4	ERHA501LGC392MED0M		1,800	76.2×95	0.25	9.10	ERHA601LGC182ME95M
	4,700	76.2×150	0.25	18.1	ERHA501LGC472MEF0M		2,200	63.5×145	0.25	11.0	ERHA601LGC222MDE5M
	5,600	76.2×170	0.25	20.8	ERHA501LGC562MEH0M		2,200	76.2×110	0.25	10.8	ERHA601LGC222MEB0M
	5,600	89×130	0.25	17.1	ERHA501LGC562MFD0M		2,700	63.5×170	0.25	13.1	ERHA601LGC272MDH0M
	6,800	89×150	0.25	20.0	ERHA501LGC682MFF0M		2,700	76.2×125	0.25	12.6	ERHA601LGC272MEC5M
	8,200	89×190	0.25	24.4	ERHA501LGC822MFK0M		3,300	76.2×145	0.25	14.9	ERHA601LGC332MEE5M
	10,000	89×210	0.25	28.2	ERHA501LGC103MFM0M		3,900	76.2×170	0.25	17.3	ERHA601LGC392MEH0M
	12,000	100×210	0.25	32.9	ERHA501LGC123MGM0M		3,900	89×130	0.25	14.2	ERHA601LGC392MFD0M
	15,000	100×250	0.25	39.8	ERHA501LGC153MGR0M		4,700	76.2×190	0.25	20.0	ERHA601LGC472MEK0M
							4,700	89×150	0.25	16.6	ERHA601LGC472MFF0M
							5,600	89×170	0.25	19.1	ERHA601LGC562MFH0M
550	1,000	50×95	0.25	5.40	ERHA551LGC102MC95M	650	1,000	63.5×100	0.25	6.30	ERHA651LGC102MDA0M
	1,200	50×110	0.25	6.30	ERHA551LGC122MCB0M		1,200	63.5×110	0.25	7.20	ERHA651LGC122MDB0M
	1,500	50×130	0.25	7.60	ERHA551LGC152MCD0M		1,500	63.5×130	0.25	8.60	ERHA651LGC152MDD0M
	1,800	63.5×105	0.25	8.60	ERHA551LGC182MDA5M		1,800	63.5×150	0.25	10.1	ERHA651LGC182MDF0M
	2,200	63.5×120	0.25	10.1	ERHA551LGC222MDC0M		2,200	63.5×170	0.25	11.7	ERHA651LGC222MDH0M
	2,700	63.5×150	0.25	12.4	ERHA551LGC272MDF0M		2,700	76.2×150	0.25	13.6	ERHA651LGC272MEF0M
	2,700	76.2×105	0.25	11.7	ERHA551LGC272MEA5M		3,300	76.2×170	0.25	15.8	ERHA651LGC332MEH0M
	3,300	63.5×170	0.25	14.5	ERHA551LGC332MDH0M		3,900	89×155	0.25	15.3	ERHA651LGC392MFF5M
	3,300	76.2×130	0.25	14.2	ERHA551LGC332MED0M		4,700	89×190	0.25	18.4	ERHA651LGC472MFK0M
	3,900	76.2×140	0.25	15.9	ERHA551LGC392MEE0M						
	4,700	76.2×170	0.25	19.1	ERHA551LGC472MEH0M						
	4,700	89×130	0.25	15.6	ERHA551LGC472MFD0M						

◆ **RATED RIPPLE CURRENT MULTIPLIERS**

● Frequency Multipliers

Frequency (Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.2	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 RHA 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.