# mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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• 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

NIPPON



#### SPECIFICATIONS

Items	Characteristics							
Category Temperature Range	-25 to +85℃							
Rated Voltage Range	350 to 450V <sub>dc</sub>							
Capacitance Tolerance	±20% (M)	20% (M) (at 20°C, 120Hz)						
Leakage Current	I=0.02CV or 5mA, which Where, I : Max. leakage of	ever is smaller. current (μΑ), C : Nominal capacitance (μF	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(	Capacitance change $C(-25^{\circ}C)/C(+20^{\circ}C) \ge 0.7$ (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 $100M\Omega$ .							
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	rance The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with th 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 δ )	$\leq$ 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 δ )	$\leq$ 200% of the initial specified value						
	Leakage current	≦The initial specified value						

#### DIMENSIONS (Screw-Mount) [mm]

Terminal Code : LG





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

### RWF<sub>Series</sub>

#### STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (µF)	Case size φD×L(mm)	tan δ	Rated ripple current (Arms/ 85°C, 120Hz)	Part No.
	1,200	$50 \times 60$	0.25	4.90	ERWF351LGC122MC60M		5,600	$63.5 \times 190$	0.25	18.2	ERWF401LGC562MDK0M
	1,800	$50 \times 75$	0.25	6.50	ERWF351LGC182MC75M		5,600	$76.2 \times 130$	0.25	16.9	ERWF401LGC562MED0M
	2,200	$50 \times 85$	0.25	7.50	ERWF351LGC222MC85M		6,800	76.2 × 155	0.25	20.2	ERWF401LGC682MEF5M
	2,200	$50 \times 96$	0.25	7.70	ERWF351LGC222MC96M	400	8,200	76.2 × 170	0.25	22.8	ERWF401LGC822MEH0M
	2,700	50 × 115	0.25	9.30	ERWF351LGC272MCB5M	400	10,000	89 × 155	0.25	26.6	ERWF401LGC103MFF5M
	3,300	50 × 130	0.25	10.8	ERWF351LGC332MCD0M		12,000	89 × 170	0.25	30.0	ERWF401LGC123MFH0M
	3,900	$63.5 \times 115$	0.25	12.1	ERWF351LGC392MDB5M		15,000	$100 \times 190$	0.25	33.7	ERWF401LGC153MGK0M
	4,700	$63.5 \times 130$	0.25	14.0	ERWF351LGC472MDD0M		18,000	$100 \times 220$	0.25	37.4	ERWF401LGC183MGN0M
250	5,600	$63.5 \times 155$	0.25	16.6	ERWF351LGC562MDF5M		820	$50 \times 60$	0.25	4.00	ERWF451LGC821MC60M
350	5,600	76.2 × 115	0.25	16.1	ERWF351LGC562MEB5M		1,000	$50 \times 75$	0.25	4.80	ERWF451LGC102MC75M
	6,800	$63.5 \times 190$	0.25	20.0	ERWF351LGC682MDK0M		1,200	$50 \times 85$	0.25	5.60	ERWF451LGC122MC85M
	6,800	$76.2 \times 130$	0.25	18.6	ERWF351LGC682MED0M		1,200	$50 \times 96$	0.25	5.70	ERWF451LGC122MC96M
	8,200	$76.2 \times 155$	0.25	22.2	ERWF351LGC822MEF5M		1,500	$50 \times 96$	0.25	6.30	ERWF451LGC152MC96M
	10,000	$76.2 \times 170$	0.25	25.2	ERWF351LGC103MEH0M		1,800	50 × 115	0.25	7.60	ERWF451LGC182MCB5M
	12,000	89 × 155	0.25	29.1	ERWF351LGC123MFF5M		2,200	50 × 130	0.25	8.80	ERWF451LGC222MCD0M
	15,000	$89 \times 190$	0.25	35.7	ERWF351LGC153MFK0M		2,700	$63.5 \times 115$	0.25	10.1	ERWF451LGC272MDB5M
	18,000	$100 \times 190$	0.25	36.9	ERWF351LGC183MGK0M		3,300	$63.5 \times 130$	0.25	11.7	ERWF451LGC332MDD0M
	22,000	$100 \times 250$	0.25	46.1	ERWF351LGC223MGR0M	450	3,900	$63.5 \times 155$	0.25	13.8	ERWF451LGC392MDF5M
	1,000	$50 \times 60$	0.25	4.40	ERWF401LGC102MC60M		3,900	76.2 × 115	0.25	13.4	ERWF451LGC392MEB5M
	1,500	$50 \times 75$	0.25	5.90	ERWF401LGC152MC75M		4,700	$63.5 \times 190$	0.25	16.7	ERWF451LGC472MDK0M
	1,800	$50 \times 85$	0.25	6.80	ERWF401LGC182MC85M		4,700	$76.2 \times 130$	0.25	15.5	ERWF451LGC472MED0M
	1,800	50  imes 96	0.25	7.00	ERWF401LGC182MC96M		5,600	$76.2 \times 155$	0.25	18.3	ERWF451LGC562MEF5M
400	2,200	$50 \times 105$	0.25	8.00	ERWF401LGC222MCA5M		6,800	$76.2 \times 170$	0.25	20.7	ERWF451LGC682MEH0M
400	2,700	$50 \times 130$	0.25	9.80	ERWF401LGC272MCD0M		8,200	89 × 155	0.25	24.1	ERWF451LGC822MFF5M
	3,300	$63.5 \times 115$	0.25	11.1	ERWF401LGC332MDB5M		10,000	89 × 170	0.25	27.8	ERWF451LGC103MFH0M
	3,900	$63.5 \times 130$	0.25	12.7	ERWF401LGC392MDD0M		12,000	$100 \times 190$	0.25	29.3	ERWF451LGC123MGK0M
	4,700	$63.5 \times 155$	0.25	15.2	ERWF401LGC472MDF5M		15,000	$100 \times 250$	0.25	37.0	ERWF451LGC153MGR0M
	4 700	$762 \times 115$	0.25	14.7	EBWE401LGC472MEB5M	_					

#### **♦**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.