ALUMINUM ELECTROLYTIC CAPACITORS

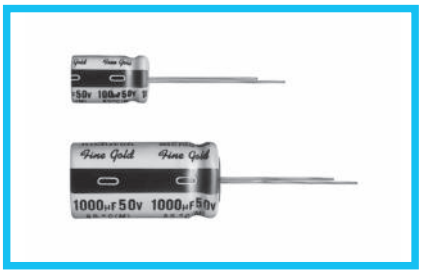
nichicon

UFG

High Grade Standard Type, For Audio Equipment

For Audio Use　Anti-Solvent Feature

- "Fine Gold"　MUSE acoustic series suited for high grade audio equipment, using state of the art etching techniques.
- Rich sound in the bass register and clearer high end, most suited for AV equipment.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

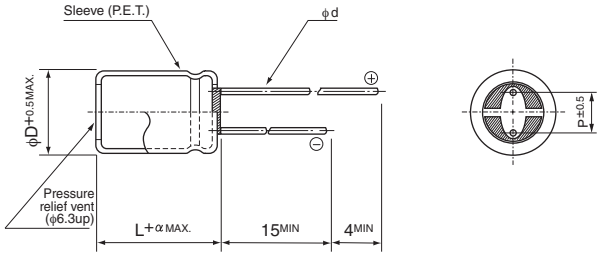


UKZ ← High Grade　**UFG**　High Grade → UFW

■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +85°C
Rated Voltage Range	6.3 to 100V
Rated Capacitance Range	1 to 10000μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3 (μA) , whichever is greater.
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 tan δ (MAX.): 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 / 0.09 / 0.09 / 0.08 For capacitance of more than 1000μF add 0.02 for every increase of 1000μF.
Stability at Low Temperature	Measurement frequency : 120Hz Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Impedance ratio (MAX.) Z−25°C / Z+20°C: 4 / 3 / 2 / 2 / 2 / 2 / 2 / 2 / 2 Impedance ratio (MAX.) Z−40°C / Z+20°C: 8 / 6 / 4 / 4 / 3 / 3 / 3 / 3 / 3
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C. Capacitance change: Within ±20% of the initial measurement for units of not more than 16V or φ6.3; Within ±15% of the initial measurement for units of not less than 25V or above φ6.3 tan δ: 150% or less than the initial specified value Leakage current: Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.
Marking	Printed with black color letter on gold sleeve.

■Radial Lead Type



(mm)

φD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.6	0.6	0.6	0.6	0.8	0.8	0.8

α	(L < 20) 1.5
	(L ≧ 20) 2.0

Type numbering system (Example : 10V 47μF)

1	2	3	4	5	6	7	8	9	10	11
U	F	G	1	A	4	7	0	M	D	M

Configuration
Capacitance tolerance (±20%)
Rated capacitance (47μF)
Rated voltage (10V)
Series name
Type

φD	Code
5	DM
6.3	EM
8 · 10	PM
12.5 to 18	HM

● Frequency coefficient of rated ripple current

Cap.(μF) \ Frequency	50Hz	120Hz	300Hz	1kHz	10kHz or more
1 to 47	0.75	1.00	1.35	1.57	2.00
100 to 470	0.80	1.00	1.23	1.34	1.50
1000 to 10000	0.85	1.00	1.10	1.13	1.15

- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

● Dimension table in next page.

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■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	Rated Ripple (mArms) (85℃/120Hz)	Part Number
6.3 (0J)	470	10×12.5	0.22	29.61	270	UFG0J471MPM
	1000	10×20	0.22	63	485	UFG0J102MPM
	2200	12.5×25	0.24	138.6	867	UFG0J222MHM
	3300	16×25	0.26	207.9	1135	UFG0J332MHM
	4700	16×31.5	0.28	296.1	1431	UFG0J472MHM
	6800	18×35.5	0.32	428.4	1810	UFG0J682MHM
	10000	18×40	0.40	630	2100	UFG0J103MHM
10 (1A)	47	5×11	0.19	4.7	60	UFG1A470MDM
	100	6.3×11	0.19	10	99	UFG1A101MEM
	220	8×11.5	0.19	22	170	UFG1A221MPM
	330	10×12.5	0.19	33	247	UFG1A331MPM
	470	10×16	0.19	47	330	UFG1A471MPM
	1000	12.5×20	0.19	100	601	UFG1A102MHM
	2200	16×25	0.21	220	1047	UFG1A222MHM
	3300	16×31.5	0.23	330	1520	UFG1A332MHM
	4700	16×35.5	0.25	470	1840	UFG1A472MHM
	6800	18×40	0.29	680	2049	UFG1A682MHM
16 (1C)	33	5×11	0.16	5.28	57	UFG1C330MDM
	47	6.3×11	0.16	7.52	74	UFG1C470MEM
	100	8×11.5	0.16	16	128	UFG1C101MPM
	220	10×12.5	0.16	35.2	226	UFG1C221MPM
	330	10×16	0.16	52.8	309	UFG1C331MPM
	470	10×20	0.16	75.2	406	UFG1C471MPM
	1000	12.5×25	0.16	160	723	UFG1C102MHM
	2200	16×25	0.18	352	1290	UFG1C222MHM
	3300	16×35.5	0.20	528	1720	UFG1C332MHM
	4700	18×35.5	0.22	752	2140	UFG1C472MHM
25 (1E)	22	5×11	0.14	5.5	50	UFG1E220MDM
	33	6.3×11	0.14	8.25	70	UFG1E330MEM
	47	6.3×11	0.14	11.75	85	UFG1E470MEM
	100	8×11.5	0.14	25	140	UFG1E101MPM
	220	10×16	0.14	55	260	UFG1E221MPM
	330	10×20	0.14	82.5	351	UFG1E331MPM
	470	12.5×20	0.14	117.5	476	UFG1E471MHM
	1000	16×25	0.14	250	854	UFG1E102MHM
	2200	16×35.5	0.16	550	1570	UFG1E222MHM
	3300	18×40	0.18	825	1794	UFG1E332MHM
35 (1V)	22	6.3×11	0.12	7.7	60	UFG1V220MEM
	33	6.3×11	0.12	11.55	75	UFG1V330MEM
	47	8×11.5	0.12	16.45	101	UFG1V470MPM
	100	10×12.5	0.12	35	176	UFG1V101MPM
	220	10×20	0.12	77	320	UFG1V221MPM
	330	12.5×20	0.12	115.5	446	UFG1V331MHM
	470	12.5×25	0.12	164.5	590	UFG1V471MHM
	1000	16×25	0.12	350	1060	UFG1V102MHM
	2200	18×35.5	0.14	770	1840	UFG1V222MHM

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code “1” and then add the appropriate code.

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■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	Rated Ripple (mArms) (85℃/120Hz)	Part Number
50 (1H)	1	5×11	0.10	3	9	UFG1H010MDM
	2.2	5×11	0.10	3	18	UFG1H2R2MDM
	3.3	5×11	0.10	3	22	UFG1H3R3MDM
	4.7	5×11	0.10	3	27	UFG1H4R7MDM
	10	5×11	0.10	5	39	UFG1H100MDM
	22	6.3×11	0.10	11	65	UFG1H220MEM
	33	8×11.5	0.10	16.5	93	UFG1H330MPM
	47	8×11.5	0.10	23.5	111	UFG1H470MPM
	100	10×16	0.10	50	215	UFG1H101MPM
	220	12.5×20	0.10	110	390	UFG1H221MHM
	330	12.5×20	0.10	165	488	UFG1H331MHM
	470	16×25	0.10	235	650	UFG1H471MHM
	1000	16×31.5	0.10	500	1143	UFG1H102MHM
63 (1J)	10	6.3×11	0.09	6.3	50	UFG1J100MEM
	22	8×11.5	0.09	13.86	85	UFG1J220MPM
	33	8×11.5	0.09	20.79	105	UFG1J330MPM
	47	10×12.5	0.09	29.61	140	UFG1J470MPM
	100	10×20	0.09	63	255	UFG1J101MPM
	220	12.5×20	0.09	138.6	420	UFG1J221MHM
	330	12.5×25	0.09	207.9	541	UFG1J331MHM
	470	16×25	0.09	296.1	840	UFG1J471MHM
	1000	18×35.5	0.09	630	1400	UFG1J102MHM
80 (1K)	10	6.3×11	0.09	8	55	UFG1K100MEM
	22	8×11.5	0.09	17.6	100	UFG1K220MPM
	33	10×12.5	0.09	26.4	130	UFG1K330MPM
	47	10×16	0.09	37.6	170	UFG1K470MPM
	100	12.5×20	0.09	80	270	UFG1K101MHM
	220	12.5×25	0.09	176	490	UFG1K221MHM
	330	16×31.5	0.09	264	650	UFG1K331MHM
	470	16×35.5	0.09	376	920	UFG1K471MHM
100 (2A)	1	5×11	0.08	3	15	UFG2A010MDM
	2.2	5×11	0.08	3	22	UFG2A2R2MDM
	3.3	5×11	0.08	3.3	27	UFG2A3R3MDM
	4.7	5×11	0.08	4.7	36	UFG2A4R7MDM
	10	8×11.5	0.08	10	65	UFG2A100MPM
	22	10×12.5	0.08	22	110	UFG2A220MPM
	33	10×16	0.08	33	150	UFG2A330MPM
	47	10×20	0.08	47	190	UFG2A470MPM
	100	12.5×20	0.08	100	300	UFG2A101MHM
	220	16×25	0.08	220	549	UFG2A221MHM
	330	16×31.5	0.08	330	734	UFG2A331MHM
	470	18×35.5	0.08	470	980	UFG2A471MHM

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code “1” and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

Mouser Electronics

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UFG1C472MHJ UFG1HR22MDM UFG1HR33MDM UFG1HR47MDM UFG1V470MEM UFG1H0R1MDM UFG2A0R1MDM UFG2AR22MDM UFG2AR33MDM UFG2AR47MDM UFG1H471MHM1TO