

UWG

Chip Type, Low Impedance



For SMD



Low Impedance



Anti-Solvent Feature

- Chip type, operating over wide temperature range of to -55 to $+105^{\circ}\text{C}$.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

UUD

Low Impedance

UWG

Low Impedance

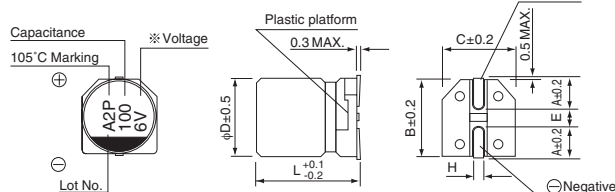
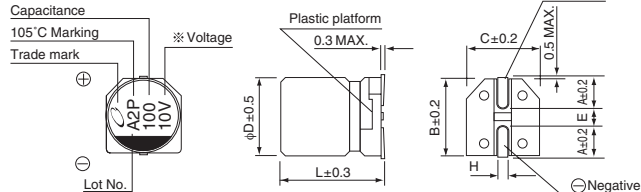
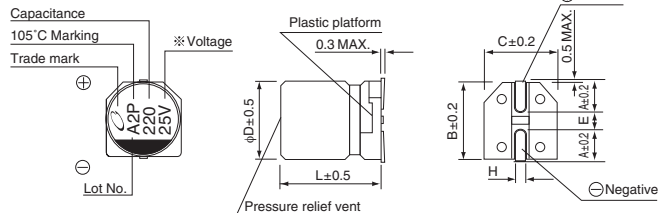
UWF



Specifications

Item	Performance Characteristics								
Category Temperature Range	-55 to +105°C								
Rated Voltage Range	6.3 to 50V								
Rated Capacitance Range	1 to 1500μF								
Capacitance Tolerance	± 20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' 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		
	tan δ (MAX.)	0.26	0.19	0.16	0.14	0.12	0.12		
Stability at Low Temperature	Measurement frequency : 120Hz								
	Rated voltage (V)		6.3	10	16	25	35	50	
	Impedance ratio	Z-25°C / Z+20°C	2	2	2	2	2	2	
	ZT / Z20 (MAX.)	Z-55°C / Z+20°C	4	4	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 105°C.				Capacitance change			Within ±20% of the initial capacitance value	
					tan δ			200% 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 105°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.								
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.				Capacitance change			Within ±10% of the initial capacitance value	
					tan δ			Less than or equal to the initial specified value	
					Leakage current			Less than or equal to the initial specified value	
Marking	Black print on the case top.								

Chip Type

($\phi 4$ to $\phi 6.3$)($\phi 8 \times 6.2$)($\phi 8 \times 10$, $\phi 10 \times 10$)

※ Voltage mark for 6.3V is 「6V」.

Type numbering system (Example : 10V 100 μF)

UWG 1A101MCL1GS

Taping code

ϕD	code
4 to 6.3	GB
8 · 10	GS

Configuration

ϕD	code
4 to 6.3	CL
8 (6.2L)	CL
8 (10L) · 10	NL

Capacitance tolerance ($\pm 20\%$)Rated capacitance (100 μF)

Rated voltage (10V)

Series name

Type

$\phi D \times L$	4 × 5.4	5 × 5.4	6.3 × 5.4	8 × 6.2	8 × 10	10 × 10
A	1.8	2.1	2.4	3.3	2.9	3.2
B	4.3	5.3	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	6.2	10	10
H	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

(mm)

Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.35	0.50	0.64	0.83	1.00

● Dimension table in next page.

CAT.8100K

UWG

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	Impedance (Ω) MAX. (20°C/100kHz)	Rated Ripple (mA _{rms}) (105°C/100kHz)	Part Number
6.3 (0J)	22	4×5.4	0.26	3	3.00	60	UWG0J220MCL1GB
	47	5×5.4	0.26	3	1.80	95	UWG0J470MCL1GB
	68	6.3×5.4	0.26	4.284	1.00	140	UWG0J680MCL1GB
	100	6.3×5.4	0.26	6.3	1.00	140	UWG0J101MCL1GB
	220	8×6.2	0.26	13.86	0.40	230	UWG0J221MCL1GS
	330	8×10	0.26	20.79	0.30	450	UWG0J331MNL1GS
	1000	10×10	0.26	63	0.15	670	UWG0J102MNL1GS
10 (1A)	1500	10×10	0.26	94.5	0.15	670	UWG0J152MNL1GS
	33	5×5.4	0.19	3.3	1.80	95	UWG1A330MCL1GB
	100	8×6.2	0.19	10	0.40	230	UWG1A101MCL1GS
	150	8×6.2	0.19	15	0.40	230	UWG1A151MCL1GS
	220	8×10	0.19	22	0.30	450	UWG1A221MNL1GS
	470	10×10	0.19	47	0.15	670	UWG1A471MNL1GS
16 (1C)	1000	10×10	0.19	100	0.15	670	UWG1A102MNL1GS
	10	4×5.4	0.16	3	3.00	60	UWG1C100MCL1GB
	22	5×5.4	0.16	3.52	1.80	95	UWG1C220MCL1GB
	47	6.3×5.4	0.16	7.52	1.00	140	UWG1C470MCL1GB
	68	8×6.2	0.16	10.88	0.40	230	UWG1C680MCL1GS
	100	8×6.2	0.16	16	0.40	230	UWG1C101MCL1GS
	220	10×10	0.16	35.2	0.15	670	UWG1C221MNL1GS
	330	10×10	0.16	52.8	0.15	670	UWG1C331MNL1GS
	470	10×10	0.16	75.2	0.15	670	UWG1C471MNL1GS
25 (1E)	680	10×10	0.16	108.8	0.15	670	UWG1C681MNL1GS
	6.8	4×5.4	0.14	3	3.00	60	UWG1E68MCL1GB
	22	6.3×5.4	0.14	5.5	1.00	140	UWG1E220MCL1GB
	33	6.3×5.4	0.14	8.25	1.00	140	UWG1E330MCL1GB
	47	8×6.2	0.14	11.75	0.40	230	UWG1E470MCL1GS
	68	8×10	0.14	17	0.30	450	UWG1E680MNL1GS
	100	8×10	0.14	25	0.30	450	UWG1E101MNL1GS
	220	10×10	0.14	55	0.15	670	UWG1E221MNL1GS
	330	10×10	0.14	82.5	0.15	670	UWG1E331MNL1GS
35 (1V)	470	10×10	0.14	117.5	0.15	670	UWG1E471MNL1GS
	1	4×5.4	0.12	3	3.00	60	UWG1V010MCL1GB
	2.2	4×5.4	0.12	3	3.00	60	UWG1V2R2MCL1GB
	3.3	4×5.4	0.12	3	3.00	60	UWG1V3R3MCL1GB
	4.7	4×5.4	0.12	3	3.00	60	UWG1V4R7MCL1GB
	6.8	5×5.4	0.12	3	1.80	95	UWG1V6R8MCL1GB
	10	5×5.4	0.12	3.5	1.80	95	UWG1V100MCL1GB
	22	6.3×5.4	0.12	7.7	1.00	140	UWG1V220MCL1GB
	33	8×6.2	0.12	11.55	0.40	230	UWG1V330MCL1GS
	47	8×6.2	0.12	16.45	0.40	230	UWG1V470MCL1GS
	100	10×10	0.12	35	0.15	670	UWG1V101MNL1GS
	220	10×10	0.12	77	0.15	670	UWG1V221MNL1GS
50 (1H)	330	10×10	0.12	115.5	0.15	670	UWG1V331MNL1GS
	1	4×5.4	0.12	3	5.00	30	UWG1H010MCL1GB
	2.2	4×5.4	0.12	3	5.00	30	UWG1H2R2MCL1GB
	3.3	4×5.4	0.12	3	5.00	30	UWG1H3R3MCL1GB
	4.7	5×5.4	0.12	3	3.00	50	UWG1H4R7MCL1GB
	10	6.3×5.4	0.12	5	2.00	70	UWG1H100MCL1GB
	22	8×6.2	0.12	11	0.70	120	UWG1H220MCL1GS
	33	8×10	0.12	16.5	0.60	300	UWG1H330MNL1GS
	47	10×10	0.12	23.5	0.30	500	UWG1H470MNL1GS
	100	10×10	0.12	50	0.30	500	UWG1H101MNL1GS
	220	10×10	0.12	110	0.30	500	UWG1H221MNL1GS

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.
- Please select UUJ if high C/V products are required.