THE DATASHEET OF

UWP1HR22MCL1GB

ALUMINUM ELECTROLYTIC CAPACITORS

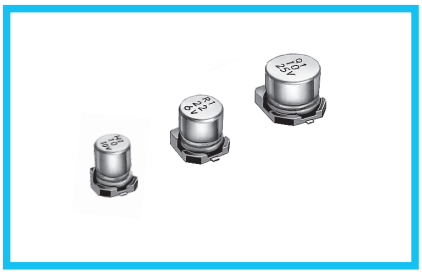
nichicon

UWP

5.5mmL Chip Type, Bi-Polarized

For SMD | Bi-polarized

- 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 Qualified. Please contact us for details.

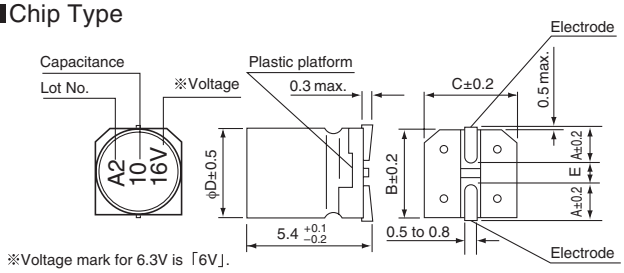


■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +85°C
Rated Voltage Range	6.3 to 50V
Rated Capacitance Range	0.1 to 47μF
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 0.05CV or 10 (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.): 0.24 / 0.20 / 0.17 / 0.17 / 0.15 / 0.15
Stability at Low Temperature	Measurement frequency : 120Hz Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 Impedance ratio ZT / Z20 (max.) Z(−25°C) / Z(+20°C): 4 / 3 / 2 / 2 / 2 / 2 Z(−40°C) / Z(+20°C): 8 / 6 / 4 / 4 / 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 with the polarity inverted every 250 hours. 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 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.
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.

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■Chip Type



※Voltage mark for 6.3V is 「6V」.

(mm)

φD	4	5	6.3
A	1.8	2.1	2.4
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E	1.0	1.3	2.2

Type numbering system (Example : 16V 10μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	W	P	1	C	1	0	0	M	C	L	1	G	B

- 1 2 3: Type
- 4 5: Series name
- 6 7 8: Rated voltage (16V)
- 9 10 11: Rated capacitance (10μF)
- 12: Capacitance tolerance (±20%)
- 13: Configuration
- 14: Taping code

●Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.70	1.00	1.17	1.36	1.50

●Dimension table in next page.

UWP

■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L(mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	Rated Ripple (mArms) (85℃/120Hz)	Part Number
6.3 (0J)	22	5×5.4	0.24	10	28	UWP0J220MCL1GB
	33	6.3×5.4	0.24	10.395	37	UWP0J330MCL1GB
	47	6.3×5.4	0.24	14.805	45	UWP0J470MCL1GB
10 (1A)	10	4×5.4	0.20	10	17	UWP1A100MCL1GB
	22	6.3×5.4	0.20	11	33	UWP1A220MCL1GB
	33	6.3×5.4	0.20	16.5	41	UWP1A330MCL1GB
16 (1C)	4.7	4×5.4	0.17	10	12	UWP1C4R7MCL1GB
	10	5×5.4	0.17	10	23	UWP1C100MCL1GB
	22	6.3×5.4	0.17	17.6	37	UWP1C220MCL1GB
	33	6.3×5.4	0.17	26.4	49	UWP1C330MCL1GB
25 (1E)	3.3	5×5.4	0.17	10	12	UWP1E3R3MCL1GB
	4.7	5×5.4	0.17	10	16	UWP1E4R7MCL1GB
	10	6.3×5.4	0.17	12.5	27	UWP1E100MCL1GB
35 (1V)	2.2	4×5.4	0.15	10	8.4	UWP1V2R2MCL1GB
	3.3	5×5.4	0.15	10	16	UWP1V3R3MCL1GB
	4.7	5×5.4	0.15	10	18	UWP1V4R7MCL1GB
	10	6.3×5.4	0.15	17.5	29	UWP1V100MCL1GB
50 (1H)	0.1	4×5.4	0.15	10	1.0	UWP1H0R1MCL1GB
	0.22	4×5.4	0.15	10	2.0	UWP1HR22MCL1GB
	0.33	4×5.4	0.15	10	2.8	UWP1HR33MCL1GB
	0.47	4×5.4	0.15	10	4.0	UWP1HR47MCL1GB
	1	4×5.4	0.15	10	8.4	UWP1H010MCL1GB
	2.2	5×5.4	0.15	10	13	UWP1H2R2MCL1GB
	3.3	5×5.4	0.15	10	17	UWP1H3R3MCL1GB
	4.7	6.3×5.4	0.15	11.75	20	UWP1H4R7MCL1GB

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

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