

ALUMINUM ELECTROLYTIC CAPACITORS

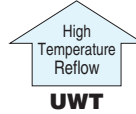
UWZ

Chip Type, Wide Temperature Range
High Temperature (260°C) Reflow



- Corresponding with 260°C peak reflow soldering
Recommended reflow condition : 260°C peak 5 sec 230°C over 60 sec 2 times
(φ8 × 6.2, φ10 × 10 : 1 time)
- Chip type operating over wide temperature range of to -55 to +105°C.
- 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.

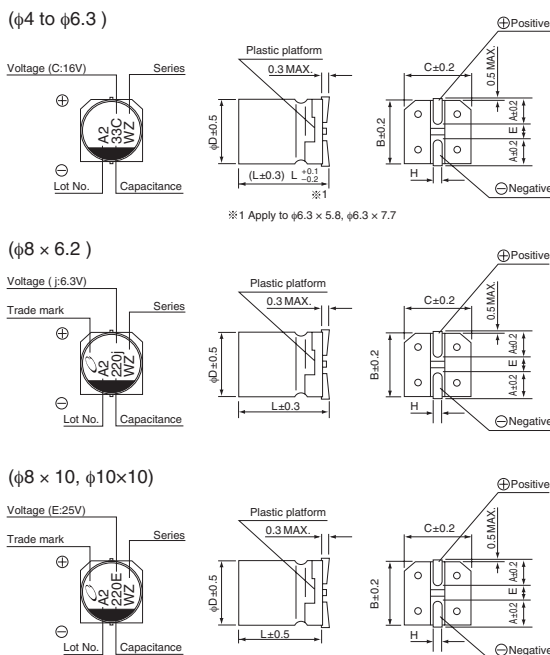
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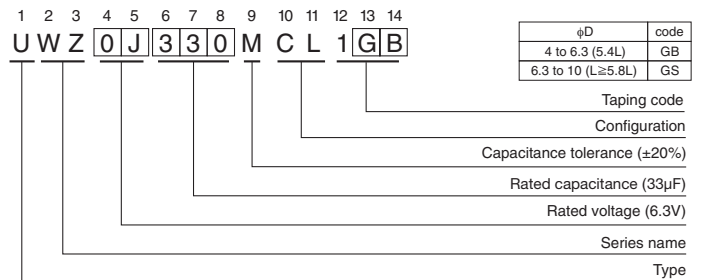
Specifications

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	
Stability at Low Temperature	Measurement frequency : 120Hz							
	Impedance ratio	Z-25°C / Z+20°C	4	3	2	2	2	2
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	8	8	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 105°C.		Capacitance change	Within ±25% of the initial capacitance value for capacitors of 16V or less. Within ±20% of the initial capacitance value for capacitors of 25V or more.				
			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



Type numbering system (Example : 6.3V 33μF)



φD × L	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 5.8	6.3 × 7.7	8 × 6.2	8 × 10	10 × 10
A	1.8	2.1	2.4	2.4	2.4	3.3	2.9	3.2
B	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.2	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	5.8	7.7	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	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Voltage	V	6.3	10	16	25	35	50
Code	j	A	C	E	V	H	

● 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.

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■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
6.3 (0J)	22	4×5.4	0.30	3	22	UWZ0J220MCL1GB
	33	5×5.4	0.30	3	30	UWZ0J330MCL1GB
	47	5×5.4	0.30	3	36	UWZ0J470MCL1GB
	100	6.3×5.4	0.30	6.3	60	UWZ0J101MCL1GB
	150	6.3×5.8	0.30	9.45	86	UWZ0J151MCL1GS
	220	8×6.2	0.30	13.86	102	UWZ0J221MCL1GS
	330	6.3×7.7	0.30	20.79	105	UWZ0J331MCL1GS
	470	8×10	0.30	29.61	210	UWZ0J471MCL1GS
	680	8×10	0.30	42.84	210	UWZ0J681MCL1GS
	1000	10×10	0.30	63	230	UWZ0J102MCL1GS
	1500	10×10	0.30	94.5	310	UWZ0J152MCL1GS
10 (1A)	22	5×5.4	0.24	3	27	UWZ1A220MCL1GB
	33	5×5.4	0.24	3.3	35	UWZ1A330MCL1GB
	47	6.3×5.4	0.24	4.7	46	UWZ1A470MCL1GB
	100	6.3×5.4	0.24	10	60	UWZ1A101MCL1GB
	150	6.3×5.8	0.24	15	86	UWZ1A151MCL1GS
	220	6.3×7.7	0.24	22	105	UWZ1A221MCL1GS
	330	8×10	0.24	33	195	UWZ1A331MCL1GS
	470	8×10	0.24	47	210	UWZ1A471MCL1GS
	680	10×10	0.24	68	310	UWZ1A681MCL1GS
	1000	10×10	0.24	100	310	UWZ1A102MCL1GS
16 (1C)	10	4×5.4	0.20	3	18	UWZ1C100MCL1GB
	22	5×5.4	0.20	3.52	30	UWZ1C220MCL1GB
	33	6.3×5.4	0.20	5.28	40	UWZ1C330MCL1GB
	47	6.3×5.4	0.20	7.52	50	UWZ1C470MCL1GB
	100	6.3×5.4	0.20	16	60	UWZ1C101MCL1GB
	150	6.3×7.7	0.20	24	95	UWZ1C151MCL1GS
	220	6.3×7.7	0.20	35.2	105	UWZ1C221MCL1GS
	330	8×10	0.20	52.8	195	UWZ1C331MCL1GS
	470	8×10	0.20	75.2	210	UWZ1C471MCL1GS
	680	10×10	0.20	108.8	310	UWZ1C681MCL1GS
25 (1E)	4.7	4×5.4	0.16	3	13	UWZ1E4R7MCL1GB
	10	5×5.4	0.16	3	23	UWZ1E100MCL1GB
	22	6.3×5.4	0.16	5.5	38	UWZ1E220MCL1GB
	33	6.3×5.4	0.16	8.25	48	UWZ1E330MCL1GB
	47	8×6.2	0.16	11.75	66	UWZ1E470MCL1GS
	100	6.3×7.7	0.16	25	91	UWZ1E101MCL1GS
	150	8×10	0.16	37.5	140	UWZ1E151MCL1GS
	220	8×10	0.16	55	155	UWZ1E221MCL1GS
	330	10×10	0.16	82.5	190	UWZ1E331MCL1GS
	470	10×10	0.16	117.5	300	UWZ1E471MCL1GS

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■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size $\phi\text{D}\times\text{L}$ (mm)	$\tan \delta$	Leakage Current (μA) (at 20°C after 2 minutes)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
35 (1V)	4.7	4×5.4	0.14	3	15	UWZ1V4R7MCL1GB
	10	5×5.4	0.14	3.5	25	UWZ1V100MCL1GB
	22	6.3×5.4	0.14	7.7	42	UWZ1V220MCL1GB
	33	8×6.2	0.14	11.55	59	UWZ1V330MCL1GS
	47	6.3×5.8	0.14	16.45	63	UWZ1V470MCL1GS
	100	6.3×7.7	0.14	35	84	UWZ1V101MCL1GS
	150	8×10	0.14	52.5	155	UWZ1V151MCL1GS
	220	10×10	0.14	77	190	UWZ1V221MCL1GS
	330	10×10	0.14	115.5	300	UWZ1V331MCL1GS
50 (1H)	1	4×5.4	0.14	3	6.3	UWZ1H010MCL1GB
	2.2	4×5.4	0.14	3	11	UWZ1H2R2MCL1GB
	3.3	4×5.4	0.14	3	14	UWZ1H3R3MCL1GB
	4.7	5×5.4	0.14	3	19	UWZ1H4R7MCL1GB
	10	6.3×5.4	0.14	5	30	UWZ1H100MCL1GB
	22	8×6.2	0.14	11	51	UWZ1H220MCL1GS
	33	6.3×7.7	0.14	16.5	60	UWZ1H330MCL1GS
	47	6.3×7.7	0.14	23.5	63	UWZ1H470MCL1GS
	100	8×10	0.14	50	140	UWZ1H101MCL1GS
	150	10×10	0.14	75	180	UWZ1H151MCL1GS
	220	10×10	0.14	110	220	UWZ1H221MCL1GS

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.