# ALUMINUM ELECTROLYTIC CAPACITORS





- Chip type with 5.5mm height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Load life of 2000 hours at 85°C.





#### Specifications

Item	Performance Characteristics													
Category Temperature Range	−40 ~ +85°C													
Rated Voltage Range	4 ~ 50V													
Rated Capacitance Range	0.1 ~ 330µF													
Capacitance Tolerance	±20% at 120Hz, 20°C													
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (µA) ,whichever is greater.													
	Measurement frequency : 120Hz, Temperature : 20°C													
tan δ	Rated voltage (V)	4	6.3	10		16	25	5	35	50				
	tan δ (MAX.)	0.35 (0.40)	0.26 (0.30)	0.20 (0.	24)	0.16 (0.19	) 0.14 (0	0.16) 0	.12 (0.14)	0.12 (0.1	4)	Values in (	) applicable to WR, $\phi$	3 case size.
	Measurement frequency : 120Hz													
Ctability at Law Tama and	Rated vo	oltage (V)		4	6	5.3	10	16	25	3	35	50		
Stability at Low Temperature	Impedance ratio	Z-25°C /		7		4	3	2	2		2	2		
	ZT / Z20 (MAX.)	Z-40°C /	Z+20°C	15		8	8	4	4		3	3		
	After 2000 hours' application of rated voltage Capacitance change Within ±20% of initial value (Within ±25% for 4 V and \$4,WR series units)												ies units)	
Endurance	at 85°C, capacitors meet the characteristic						itanee e	200% or less of initial specified value						
							Leakage Current Initial specifed value or less							
Shelf Life	helf Life After leaving capacitors under no load at 85°C for 1000 hours, they meet the specified value for endurance characteristics listed above.													
Resistance to soldering	The capacitors shall be kept on the hot plate maintained at 250°C										initial value	1		
	for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right.							tan δ			Initial specified value or less			
heat												Initial specified value or less		
Marking	Black print on the case top.													

### Chip Type



Type numbering system (Example : 16V  $10 \mu F)$ 



• In the case of size  $\phi 3$  in ( ), parentheses, use WX in the 2nd and 3rd digit and put a 2 in the 12th digit of type numbering system.

In case of marking for \$\$ units, "V" for rated voltage is omitted.

% 2. In case of marking for  $\phi3$  units, Lot No.is expressed by a digit (month code).

## CAT.8100R

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## Dimensions

	V	4	4	6	.3	1	0	1	6	2	:5	3	5	5	0
Сар. (µF)	Cap. (μF) Code 0G		OJ		1A		1C		1E		1V		1H		
0.1	0R1		1											4 (3)	1.0
0.22	R22				1									4 (3)	2.0
0.33	R33		1				1							4 (3)	2.8
0.47	R47													4 (3)	4.0
1	010		   											4 (3)	8.4 (8.0)
2.2	2R2		   									3	8.4	4 (3)	13 (10)
3.3	3R3		1						1		1	3	10	4	17
4.7	4R7									4 (3)	16 (12)	4	18	• 5	20 (18)
10	100		 				_	4 (3)	23 (18)	• 5	27 (24)	• 5	29 (24)	o 6.3	33 (30)
22	220	3	19	4 (3)	28 (21)	• 5	33 (30)	• 5	37 (30)	° 6.3	42 (38)	° 6.3	46 (39)	□ 8	52 (43)
33	330	4	28	• 5	37 (34)	• 5	41 (34)	° 6.3	49 (44)	o <b>6.3</b>	52 (46)	□8	62 (53)	8	71
47	470	4	33	• 5	45 (40)	° 6.3	52 (47)	° 6.3	58 (52)	□ 8	70 (60)	8	80		
56	560	5	42	o 6.3	52 (46)	° 6.3	57 (50)	o <b>6.3</b>	63 (57)	□ 8	76 (65)				
100	101	5	56	o 6.3	70 (47)	o <b>6.3</b>	76 (54)	6.3	86	8	110				
150	151	6.3	79	6.3	71	□ 8	111 (76)								
220	221	6.3	96	□ 8	110 (74)	8	135								Rated
330	331	8	145	8	170									Case size	Rated

( ) is also available with ø3mm upon request.

In this case of size  $\phi$ 3 in ( ), parentheses, use WX at 2nd and 3rd digit and put 2 at the 12th digit of type numbering system.

Rated Ripple (mA rms) at 85°C 120Hz () =  $\phi$  3 units and WR series.

Size  $\varphi4$  is available for capacitors marked. " • " Size  $\varphi5$  is available for capacitors marked. " • " Size  $\varphi6.3$  is available for capacitors marked. "  $\square$  "

In such a case, MR will be put at 2nd and 3rd digit of type numbering system.

### Frequency coefficient of rated ripple current

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

Taping Specifications are given in page 21.

Please refer to page 3 for the minimum order quantity.