

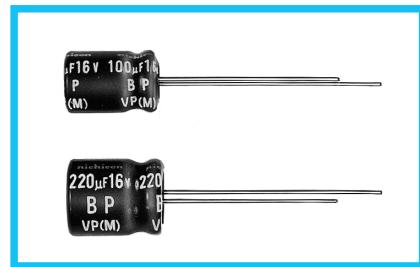
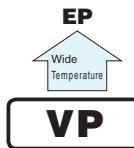
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

VP Bi-Polarized
series



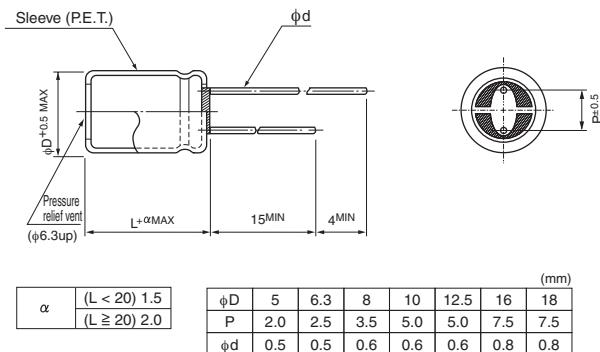
- Standard bi-polarized series for entertainment electronics.
- Compliant to the RoHS directive (2011/65/EU).



■ Specifications

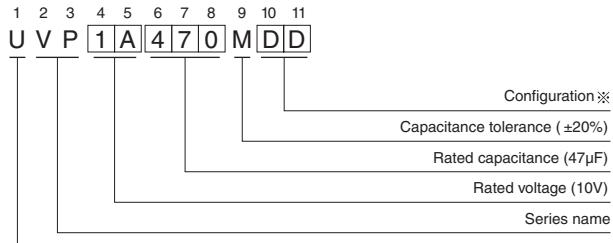
Item	Performance Characteristics																
Category Temperature Range	-40 to +85°C																
Rated Voltage Range	6.3 to 100V																
Rated Capacitance Range	0.47 to 6800μF																
Capacitance Tolerance	±20% at 120Hz, 20°C																
Leakage Current	After 5 minutes' application of rated voltage at 20°C, leakage current is not more than 0.03CV or 3 (μA), whichever is greater.																
Tangent of loss angle (tan δ)	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF. Measurement frequency : 120Hz at 20°C																
	Rated voltage (V)	6.3	10	16	25	35	50	63	100								
	tan δ (MAX.)	0.26	0.24	0.22	0.20	0.16	0.14	0.12	0.10								
Stability at Low Temperature	Measurement frequency : 120Hz																
	Rated voltage (V)	6.3	10	16	25	35	50	63	100								
	Impedance ratio	Z-25°C / Z+20°C	4	3	2	2	2	2	2								
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	10	8	6	5	4	4	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 2000 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.																
Marking	Printed with white color letter on black sleeve.																

■ Radial Lead Type



• Please refer to page 20 about the end seal configuration.

Type numbering system (Example : 10V 47μF)



※ Configuration

ϕ D	Pb-free leadwire Pb-free PET sleeve
5	DD
6.3	ED
8 · 10	PD
12.5 to 18	HD

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

● Dimension table in next page.

CAT.8100D

VP series

■ Dimensions

Cap. (μF)	V	6.3		10		16		25		35		50		63		100	
		Code	0J	Code	1A	Code	1C	Code	1E	Code	1V	Code	1H	Code	1J	Code	2A
0.47	R47											5 × 11	11			5 × 11	14
1	010											5 × 11	17			5 × 11	21
2.2	2R2											5 × 11	25			6.3 × 11	34
3.3	3R3											5 × 11	27	5 × 11	28	6.3 × 11	39
4.7	4R7											5 × 11	34	5 × 11	34	6.3 × 11	47
10	100					5 × 11	42	5 × 11	42	5 × 11	43	6.3 × 11	52	6.3 × 11	57	8 × 11.5	71
22	220			5 × 11	57	5 × 11	57	6.3 × 11	65	6.3 × 11	73	8 × 11.5	89	8 × 11.5	95	10 × 16	135
33	330	5 × 11	64	5 × 11	64	5 × 11	70	6.3 × 11	80	8 × 11.5	100	8 × 11.5	105	10 × 12.5	135	12.5 × 20	220
47	470	5 × 11	76	5 × 11	76	6.3 × 11	95	6.3 × 11	95	8 × 11.5	120	10 × 12.5	150	10 × 16	180	12.5 × 20	240
100	101	6.3 × 11	125	6.3 × 11	125	8 × 11.5	160	8 × 11.5	160	10 × 16	230	10 × 20	265	12.5 × 20	320	16 × 25	425
220	221	8 × 11.5	215	8 × 11.5	215	10 × 12.5	275	10 × 16	305	12.5 × 20	410	12.5 × 25	480	16 × 25	575	18 × 35.5	720
330	331	8 × 11.5	265	10 × 16	345	10 × 16	375	12.5 × 20	450	12.5 × 20	505	16 × 25	650	16 × 31.5	655		
470	471	10 × 12.5	370	10 × 16	410	10 × 20	485	12.5 × 20	540	12.5 × 25	655	16 × 31.5	835	18 × 35.5	965		
1000	102	10 × 20	650	12.5 × 20	720	12.5 × 25	855	16 × 25	950	16 × 31.5	1140						
2200	222	12.5 × 25	1160	16 × 25	1280	16 × 31.5	1510	18 × 35.5	1620								
3300	332	16 × 25	1570	16 × 31.5	1690	18 × 35.5	1980										
4700	472	16 × 31.5	2020	18 × 35.5	2160												
6800	682	18 × 35.5	2600													Case size ΦD × L (mm)	Rated ripple

Rated ripple current (mA rms) at 85°C 120Hz

● Frequency coefficient of rated ripple current

Cap.(μF)	Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
0.47 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 6800		0.85	1.00	1.10	1.13	1.15

Mouser Electronics

Authorized Distributor

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[UVP1C471MPD1TD](#) [UVP1C330MDD1TA](#)