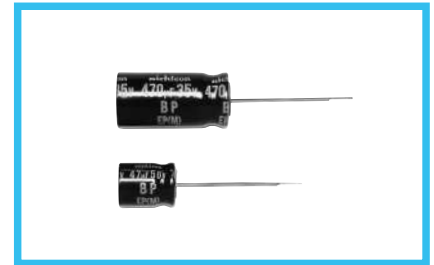


ALUMINUM ELECTROLYTIC CAPACITORS

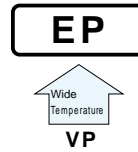


Bi-Polarized, Wide Temperature Range

series



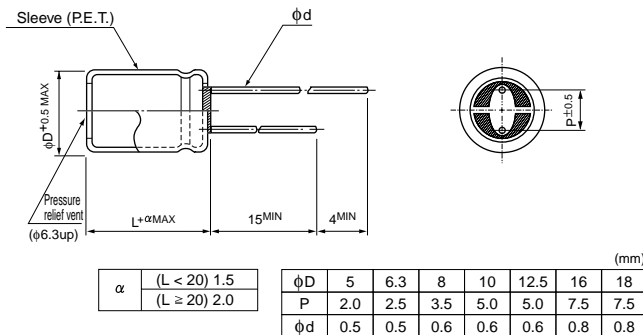
- Bi-polarized series for operations over wide temperature range of -55°C to +105°C.
- Compliant to the RoHS directive (2002/95/EC).



Specifications

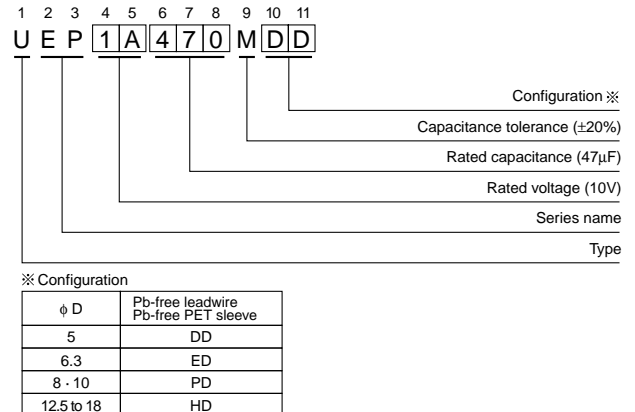
Item	Performance Characteristics										
Category Temperature Range	-55 to +105°C										
Rated Voltage Range	6.3 to 100V										
Rated Capacitance Range	0.47 to 6800μF										
Capacitance Tolerance	±20% at 120Hz, 20°C										
Leakage Current	After 5 minutes' application of rated voltage, leakage current is not more than 0.03CV or 3 (μA), whichever is greater.										
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C										
	Rated voltage (V)	6.3	10	16	25	35	50	63	100		
	tan δ (MAX.)	0.24	0.24	0.20	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	50	63	100		
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C		4	3	2	2	2	2	2	
Z-40°C / Z+20°C		10	8	6	4	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 with the polarity inverted every 250 hours.										
	Capacitance change	Within ±25% of the initial capacitance value (6.3to16V)									
	tan δ	Within ±20% of the initial capacitance value (25to100V)									
	Leakage current	150% or less than 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.										
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)



Dimensions

Cap. (μF)	V Code	6.3		10		16		25		35		50		63		100	
		0J		1A		1C		1E		1V		1H		1J		2A	
0.47	R47											5×11	8			5×11	10
1	010											5×11	12			5×11	15
2.2	2R2											5×11	18			6.3×11	20
3.3	3R3											5×11	22	5×11	20	6.3×11	25
4.7	4R7											5×11	22	6.3×11	31	6.3×11	30
10	100					5×11	30	5×11	34	5×11	30	6.3×11	37	6.3×11	40	8×11.5	50
22	220			5×11	42	5×11	40	6.3×11	55	6.3×11	51	8×11.5	63	8×11.5	68	10×16	97
33	330	5×11	46	5×11	45	5×11	49	6.3×11	56	8×11.5	72	8×11.5	77	10×12.5	98	12.5×20	140
47	470	5×11	54	5×11	54	6.3×11	67	6.3×11	67	8×11.5	86	10×12.5	105	10×16	130	12.5×20	170
100	101	6.3×11	90	6.3×11	90	8×11.5	110	8×11.5	110	10×16	160	10×20	190	12.5×20	225	16×25	300
220	221	8×11.5	150	8×11.5	150	10×12.5	195	10×16	215	12.5×20	290	12.5×25	340	16×25	405	18×35.5	510
330	331	8×11.5	185	10×16	240	10×16	265	12.5×20	320	12.5×20	350	16×25	460	16×31.5	535		
470	471	10×12.5	260	10×16	290	10×20	345	12.5×20	380	12.5×25	465	16×31.5	590	18×35.5	680		
1000	102	10×20	460	12.5×20	510	12.5×25	605	16×25	670	16×31.5	805						
2200	222	12.5×25	820	16×25	910	16×31.5	1070	18×35.5	1140								
3300	332	16×25	1110	16×31.5	1200	18×35.5	1400										
4700	472	16×31.5	1430	18×35.5	1520												
6800	682	18×35.5	1830														

Rated ripple current (mA rms) at 105°C 120Hz

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