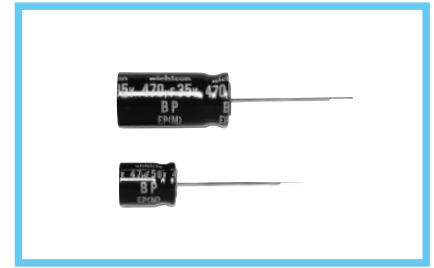
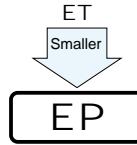


EP series Bi-Polarized, Wide Temperature Range



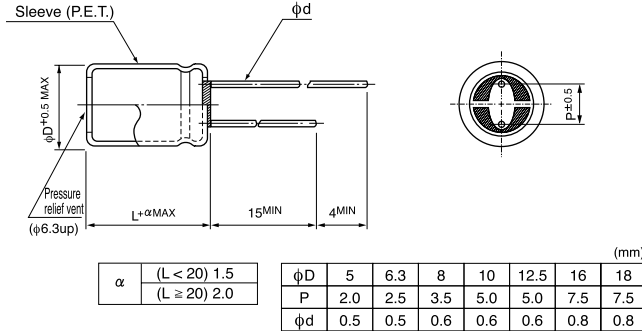
- 1 ~ 2 ranks smaller than ET series.
- Adapted to the RoHS directive (2002/95/EC).



Specifications

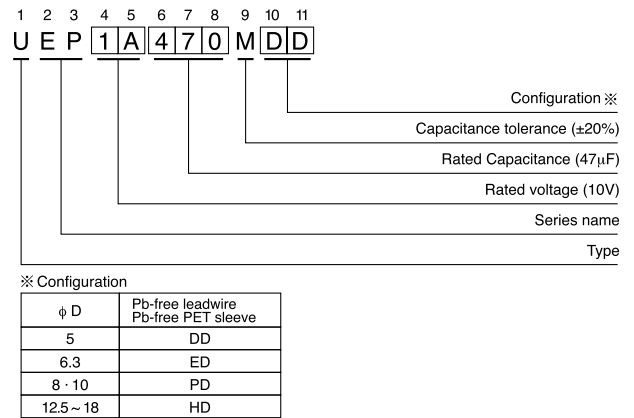
Item	Performance Characteristics									
Category Temperature Range	-55 ~ +105°C									
Rated Voltage Range	6.3 ~ 100V									
Rated Capacitance Range	0.47 ~ 6800μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	After 5 minutes' application of rated voltage, leakage current is not more than 0.03CV or 3 (μA), whichever is greater.									
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	35	50	63	100
	Impedance ratio	Z-25°C / Z+20°C	4	3	2	2	2	2	2	2
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	10	8	6	4	3	3	3	3
Endurance	After 1000 hours' application of rated voltage at 105°C, with the polarity inverted every 250 hours, capacitors meet the characteristic requirements listed at right.									
	Capacitance change	Within ±25% of initial value (6.3~16V) Within ±20% of initial value (25~100V)								
	tan δ	150% or less of initial specified value								
	Leakage current	Initial specified value or less								
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.									
Marking	Printed with white color letter on black sleeve.									

Radial Lead Type



• Please refer to page 21 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	7			5 × 11	8
1	010												5 × 11	10			5 × 11	12
2.2	2R2												5 × 11	15			6.3 × 11	20
3.3	3R3												5 × 11	18	5 × 11	20	6.3 × 11	25
4.7	4R7												5 × 11	22	6.3 × 11	24	6.3 × 11	30
10	100					5 × 11	27	5 × 11	27	5 × 11	30	6.3 × 11	37	6.3 × 11	40	8 × 11.5	50	
22	220			5 × 11	37	5 × 11	40	6.3 × 11	46	6.3 × 11	51	8 × 11.5	63	8 × 11.5	68	10 × 16	97	
33	330	5 × 11	45	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 (mArms) at 105°C 120Hz

Please refer to page 21, 22, 23 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.