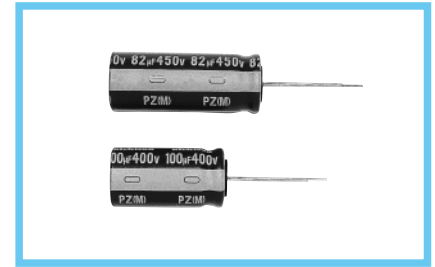
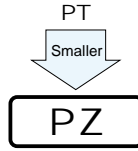


**PZ** High Voltage, Smaller-sized series



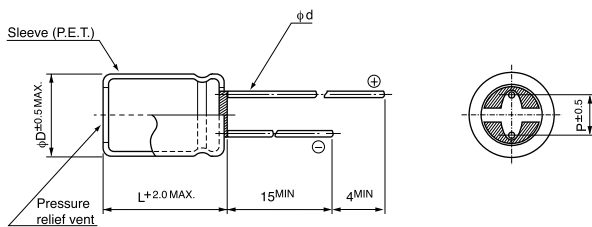
- High ripple current.
- Load life of 2000 hours at 105°C.
- Suited for ballast applications.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

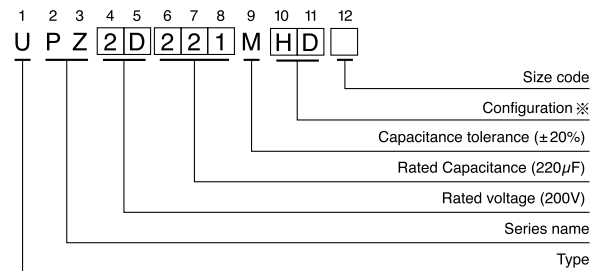
Item	Performance Characteristics									
Category Temperature Range	-25 ~ +105°C									
Rated Voltage Range	200 ~ 450V									
Rated Capacitance Range	18 ~ 470µF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	After 1 minutes' application of rated voltage, leakage current is not more than 0.04CV+100 (µA).									
tan δ	Measurement frequency : 120Hz, Temperature : 20°C									
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>200</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>tan δ (MAX.)</td> <td>0.12</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table>	Rated voltage (V)	200	400	420	450	tan δ (MAX.)	0.12	0.15	0.20
Rated voltage (V)	200	400	420	450						
tan δ (MAX.)	0.12	0.15	0.20	0.20						
Stability at Low Temperature	Measurement frequency : 120Hz									
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>200</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>Impedance ratio ZT / Z20 (MAX.) Z-25°C / Z+20°C</td> <td>3</td> <td>8</td> <td>8</td> <td>8</td> </tr> </table>	Rated voltage (V)	200	400	420	450	Impedance ratio ZT / Z20 (MAX.) Z-25°C / Z+20°C	3	8	8
Rated voltage (V)	200	400	420	450						
Impedance ratio ZT / Z20 (MAX.) Z-25°C / Z+20°C	3	8	8	8						
Endurance	After an application of D.C. bias voltage plus the rated ripple current for 2000 hours at 105°C the peak voltage shall not exceed the rated D.C. voltage, capacitors meet the characteristic requirements listed at right.									
	Capacitance change	Within ±20% of initial value								
	tan δ	200% or less of initial specified value								
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.									
	Leakage current	Initial specified value or less								
Marking	Printed with white color letter on dark brown sleeve.									

## Radial Lead Type



	(mm)			
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.8	0.8	0.8

## Type numbering system (Example : 200V 220µF)



### ※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
10	PD
12.5 ~ 18	HD

• Please refer to page 21 about the end seal configuration.

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

- Dimension table in next page.

## ■ Dimensions

Cap. (μF)	V	Code	200		400		420		450	
			2D		2G		W6		2W	
18	180	180							10×31.5	180
22	220	220					10×31.5	200		
27	270	270			10×31.5	240				
33	330	330							12.5×31.5	280
39	390	390					12.5×31.5	310	12.5×35.5	320
47	470	470			12.5×31.5	370	12.5×35.5	360	12.5×40	380
56	560	560			12.5×35.5	420	12.5×40	430	16×31.5	440
68	680	680			12.5×40	480	16×31.5	510	16×35.5	490
82	820	820	10×31.5	400			16×35.5	570	16×40	550
									▲18×31.5	550
100	101	101			16×31.5	580	16×40	610	18×35.5	650
							▲18×31.5	610		
120	121	121			16×35.5	670	18×35.5	660	18×40	740
					▲18×31.5	670				
150	151	151	12.5×31.5	620	16×40	770	18×40	710		
					▲18×35.5	770				
180	181	181	12.5×35.5	700	18×40	880				
220	221	221	12.5×40	800						
270	271	271	16×31.5	870						
330	331	331	16×35.5	1010						
			▲18×31.5	1010						
390	391	391	16×40	1130						
			▲18×35.5	1120						
470	471	471	18×40	1270					Case size φD×L (mm)	Rated Ripple

Rated Ripple (mArms) at 105°C 120Hz

▲ : In this case, [6] will be put at 12th digit of type numbering system.

## ● Frequency coefficient of rated ripple current

V	60Hz	120Hz	500Hz	1kHz	10kHz~
200	0.80	1.00	1.20	1.30	1.40
400 ~ 450	0.80	1.00	1.25	1.40	1.50