ALUMINUM ELECTROLYTIC CAPACITORS

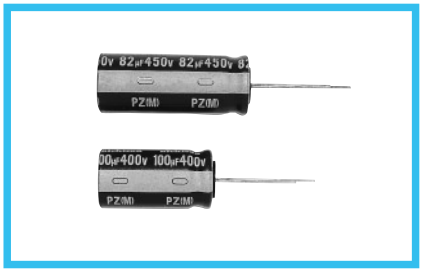
nichicon

PZ High Voltage, Smaller-sized series

Smaller | High Ripple Current

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

PT → Smaller → PZ



■Specifications

Item	Performance Characteristics
Category Temperature Range	−25 to +105°C
Rated Voltage Range	200 to 450V
Rated Capacitance Range	18 to 470µF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.04CV+100 (µA).
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C

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

Rated voltage (V)		200	400	420	450
Impedance ratio ZT / Z20 (MAX.)	Z−25°C / Z+20°C	3	8	8	8

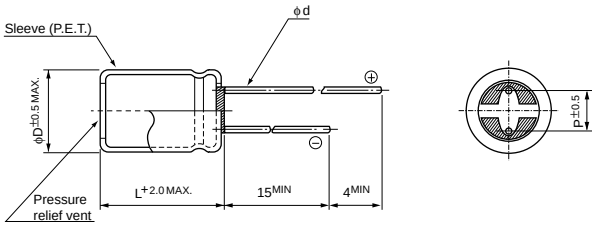
Endurance — The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 2000 hours at 105°C, the peak voltage shall not exceed the rated voltage.

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 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 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

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

Type numbering system (Example : 200V 220µF)

1	2	3	4	5	6	7	8	9	10	11	12
U	P	Z	2	D	2	2	1	M	H	D	

- 12: Size code
- 10, 11: Configuration ※
- 9: Capacitance tolerance (±20%)
- 6, 7, 8: Rated capacitance (220µF)
- 4, 5: Rated voltage (200V)
- 2, 3: Series name
- 1: Type

※Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
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.

PZ series

■Dimensions

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

Rated ripple current (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 or more
200	0.80	1.00	1.20	1.30	1.40
400 to 450	0.80	1.00	1.25	1.40	1.50