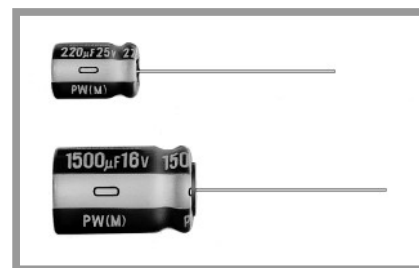
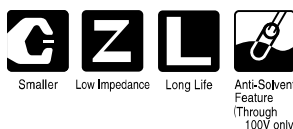


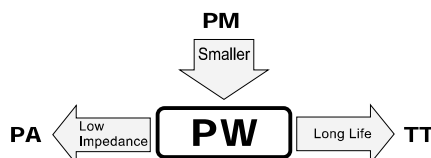
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

PW Miniature Sized, Low Impedance,
High Reliability For Switching Power Supplies
series



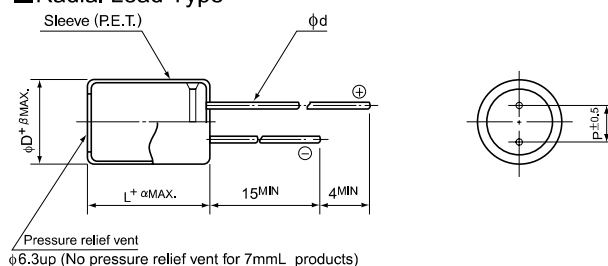
- Smaller case size and lower impedance than PM series.
- Low impedance and high reliability withstanding 2000 hours to 8000 hours.
- Capacitance ranges available based on the numerical values in E12 series under JIS.
- Compliant to the RoHS directive (2011/65/EU).



Specifications

Item	Performance Characteristics																						
Category Temperature Range	-55 to +105°C (6.3 to 100V), -40 to + 105°C (160 to 400V), -25 to +105°C (450V)																						
Rated Voltage Range	6.3 to 450V																						
Rated Capacitance Range	0.47 to 15000μF																						
Capacitance Tolerance	±20% at 120Hz, 20°C																						
Leakage Current	Rated voltage (V)	6.3 to 100						160 to 450															
	Leakage current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 (μA), whichever is greater.						CV ≤ 1000: I = 0.1CV+40 (μA) max. (1 minute's) CV > 1000: I = 0.04CV+100 (μA) max. (1 minute's)															
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	160 to 250	315 · 350	400 · 450											
	tan δ (MAX.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.15	0.20	0.25											
Stability at Low Temperature	120Hz																						
	Rated voltage (V)			6.3 · 10	16 · 25	35 · 50	63 · 100	160 · 200	250	315 · 350	400	450											
	Impedance ratio (MAX.)	Z-25°C / Z+20°C			—	—	—	—	3	3	4	6	15										
		Z-40°C / Z+20°C			—	—	—	—	4	6	8	10	—										
			Z-55°C / Z+20°C			3	3	3	3	—	—	—											
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 8000 hours (2000 hours for φD=4, 5 and 6.3, 3000 hours for φD=8, 5000 hours for φD=10, 7000 hours for φD=12.5) 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

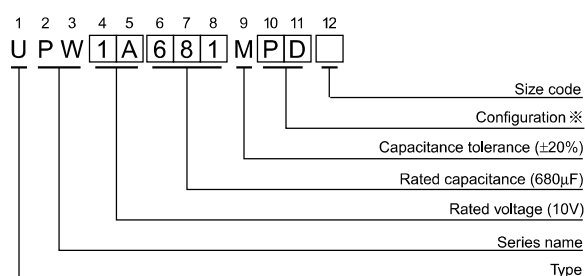


α	(L = 7) 1.0
	(L < 20) 1.5
	(L ≥ 20) 2.0

	φD	4	5	6.3	8	10	12.5	16	18	20	22	25
P	1.5	2.0	2.5	3.5	5.0	5.0	5.0	7.5	7.5	10.0	10.0	12.5
φd	0.45	0.5	0.5	0.6	0.6	0.6	0.6	0.8	0.8	1.0	1.0	1.0
β	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0

※: Applied to L>25 products
(): Applied to 7mmL products

Type numbering system (Example : 10V 680µF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
4 · 5	DD
6.3	ED (7mm L : DD)
8 · 10	PD
12.5 to 18	HD
20 to 25	RD

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

Frequency coefficient of rated ripple current

V	Cap. (µF)	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz or more
6.3 to 100	0.47 to 56		0.20	0.30	0.50	0.80	1.00
			0.55	0.65	0.75	0.85	1.00
			0.70	0.75	0.80	0.90	1.00
			0.80	0.85	0.90	0.95	1.00
160 to 450	0.47 to 220		0.80	1.00	1.25	1.40	1.60
			0.90	1.00	1.10	1.13	1.15

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.8100C