

# **CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS**



# UPE Series

- Super low ESR at a high frequency ranged
  - High ripple current capability
  - 5,000 hours at 105°C



## ◆ SPECIFICATIONS

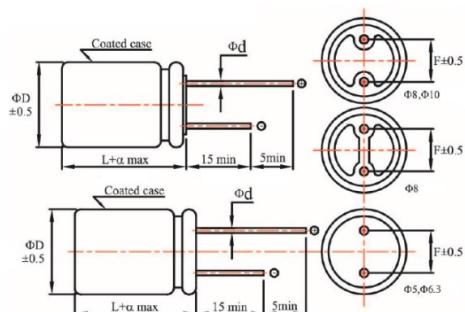
Item	Performance Characteristics	
Category Temperature Range	-55 ~ +105°C	
Working Voltage Range	2.5 ~ 50Vdc	
Surge Voltage	Rated Voltage × 1.15	
Capacitance Tolerance	M: ±20% (at 25°C and 120Hz)	
ESR	See the standard ratings table (at 25°C, 100~300KHz)	
Dissipation Factor (Tanδ)	See the standard ratings table (at 25°C, 120Hz)	
Leakage Current ≈ 1	See the standard ratings table (Impress the rated voltage for 2 minutes)	
Low Temperature Characteristics Impedance Ratio	Z(-25°C)/Z(+25°C) ≤ 1.15 at 100KHz Z(-55°C)/Z(+25°C) ≤ 1.25 at 100KHz	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage for 5,000 hours at 105°C.	
	Capacitance change	≤ ±20% of the initial value
	ESR	≤ 150% of the specified value
	Dissipation factor(tanδ)	≤ 150% of the specified value
	Leakage current	≤ specified value
Damp Heat (Steady State)	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 60°C 90 to 95% RH.	
	Capacitance change	≤ ±20% of the initial value
	ESR	≤ 150% of the specified value
	Dissipation factor(tanδ)	≤ 150% of the specified value
	Leakage current	≤ specified value
Others	Conforms to JIS-C-5101-26 (2012)	

\*1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C.

※1 In case of some problems for measured values, measure after applying rated voltage.  
※2 ESR should be measured at both of the terminal ends closest to the capacitor body.

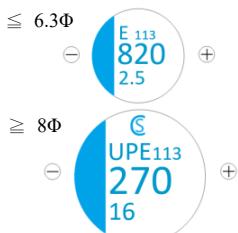
◆ DIMENSIONS (mm)

## ◆ LEAD

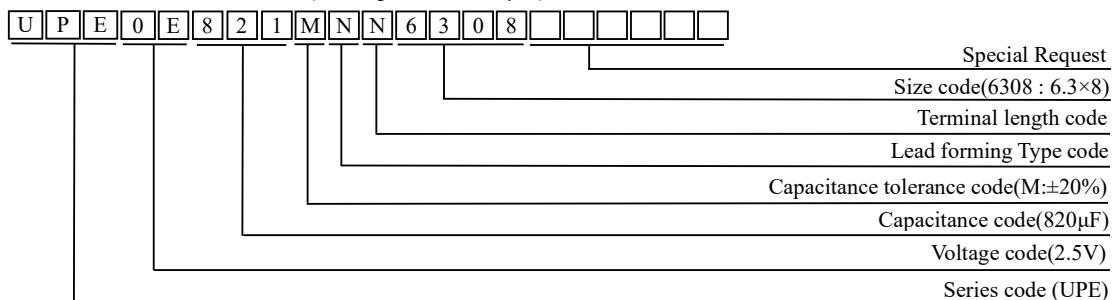


ΦD	5	6.3	6.3	8	8	10
Φd	0.45	0.45	0.6	0.6	0.6	0.6
	8	5~6	8	6~8	11~12	12
α	1	1	1	1	1.5	1.5
F	2.0	2.5	2.5	3.5	3.5	5.0

## ◆ MARKING



#### ◆ PART NUMBER SYSTEM ( Example : 2.5V 820μF )



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## UPE Series

### ◆ STANDARD RATINGS

WV (Vdc)	Cap ( $\mu$ F)	Case Size (mm) $\Phi$ D×L	ESR 100~300KHz (m $\Omega$ max)	Rated Ripple current (mAmps/ 105°C, 100KHz)	Tan $\delta$ max	Leakage Current ( $\mu$ A max)	Part Number
2.5 (0E)	390	6.3×5	10	3900	0.10	500	UPE0E391MNN6305
	560	5×8	7	4200	0.10	500	UPE0E561MNN0508
	560	6.3×8	7	5000	0.10	500	UPE0E561MNN6308
	560	8×8	8	4700	0.10	500	UPE0E561MNN0808U
	820	6.3×8	7	5000	0.10	500	UPE0E821MNN6308
	820	8×8	7	6100	0.10	500	UPE0E821MNN0808U
	1000	8×8	7	6100	0.10	900	UPE0E102MNN0808U
3.0 (0F)	820	6.3×8	7	5600	0.10	500	UPE0F821MNN6308
4.0 (0G)	560	6.3×8	7	5000	0.10	500	UPE0G561MNN6308
	560	8×8	7	6100	0.10	500	UPE0G561MNN0808U
6.3 (0J)	100	6.3×5	45	1700	0.10	300	UPE0J101MNN6305
	100	6.3×8	35	2100	0.10	500	UPE0J101MNN6308
	330	5×8	8	4050	0.10	500	UPE0J331MNN0508
	470	6.3×8	8	4700	0.10	592	UPE0J471MNN6308
	560	6.3×8	8	4700	0.10	706	UPE0J561MNN6308
	560	8×8	7	6100	0.10	706	UPE0J561MNN0808U
	820	6.3×8	8	4700	0.10	1033	UPE0J821MNN6308
	820	8×8	8	6100	0.10	1033	UPE0J821MNN0808U
	1500	8×11	9	5650	0.10	1890	UPE0J152MNN0811U
16 (1C)	100	6.3×5	24	2490	0.10	500	UPE1C101MNN6305
	100	6.3×8	24	2490	0.10	500	UPE1C101MNN6308
	180	6.3×5	22	3300	0.10	576	UPE1C181MNN6305
	180	8×8	10	5000	0.10	576	UPE1C181MNN0808U
	180	8×11	16	4360	0.10	576	UPE1C181MNN0811U
	220	8×6	13	4150	0.10	500	UPE1C221MNN0806
	270	6.3×8	15	3800	0.10	864	UPE1C271MNN6308
	270	6.3×8	10	5080	0.10	864	UPE1C271MNN6308E
	270	8×6	22	3300	0.10	864	UPE1C271MNN0806
	270	8×8	10	5000	0.10	864	UPE1C271MNN0808U
	270	8×11	11	5000	0.10	864	UPE1C271MNN0811U
	330	8×8	11	4700	0.10	1056	UPE1C331MNN0808U
	470	8×8	16	4000	0.10	1504	UPE1C471MNN0808U
	470	8×11	11	5400	0.10	1504	UPE1C471MNN0811U
	470	10×12	10	6100	0.10	1504	UPE1C471MNN1012U
	560	8×11	14	4970	0.10	1792	UPE1C561MNN0811U
	820	10×12	12	5400	0.10	2624	UPE1C821MNN1012U
	1000	10×12	12	5400	0.10	3200	UPE1C102MNN1012U
20 (1D)	180	6.3×8	18	3460	0.10	720	UPE1D181MNN6308
	390	8×11	14	4970	0.10	1560	UPE1D391MNN0811U
	470	8×11	14	4970	0.10	1880	UPE1D471MNN0811U
	560	10×12	12	5400	0.10	2240	UPE1D561MNN1012U
	680	10×12	12	5400	0.10	2720	UPE1D681MNN1012U
25 (1E)	56	6.3×5	30	2800	0.10	300	UPE1E560MNN6305
	82	6.3×8	30	2800	0.10	500	UPE1E820MNN6308
	82	8×8	28	3000	0.10	410	UPE1E820MNN0808U
	180	8×8	18	4100	0.10	900	UPE1E181MNN0808U
	180	8×11	16	4650	0.10	900	UPE1E181MNN0811U
	220	8×11	16	4650	0.10	1100	UPE1E221MNN0811U
	330	10×12	14	5000	0.10	1650	UPE1E331MNN1012U
	390	10×12	14	5000	0.10	1950	UPE1E391MNN1012U
35 (1V)	820	10×12	20	3400	0.10	4100	UPE1E821MNN1012U
	22	6.3×5	35	2600	0.10	300	UPE1V220MNN6305
	33	8×8	30	2800	0.10	300	UPE1V330MNN0808U
	47	6.3×8	45	2000	0.10	329	UPE1V470MNN6308
	82	8×11	20	4000	0.10	574	UPE1V820MNN0811U
50 (1H)	120	10×12	18	4400	0.10	840	UPE1V121MNN1012U
	39	8×11	25	2400	0.10	390	UPE1H390MNN0811U