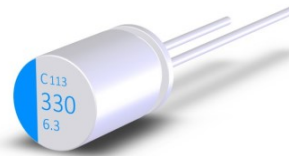


# CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS



## UPC Series NEW

- Super low ESR at a high frequency ranged
- High ripple current capability
- 2,000 hours at 105°C



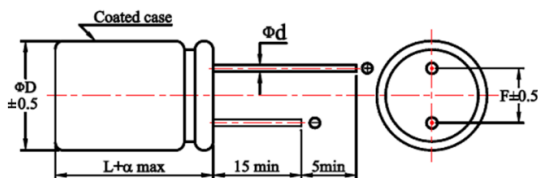
### ◆ SPECIFICATIONS

Item	Performance Characteristics								
Category Temperature Range	-55 ~ +105°C								
Working Voltage Range	6.3 ~ 22Vdc								
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 2,000 hours at 105°C. <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance change</td> <td>≦ ±20% of the initial value</td> </tr> <tr> <td>ESR</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≦ specified value</td> </tr> </table>	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
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. <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance change</td> <td>≦ ±20% of the initial value</td> </tr> <tr> <td>ESR</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≦ 150% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≦ specified value</td> </tr> </table>	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
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.

※2 ESR should be measured at both of the terminal ends closest to the capacitor body.

### ◆ DIMENSIONS (mm)



### ◆ LEAD

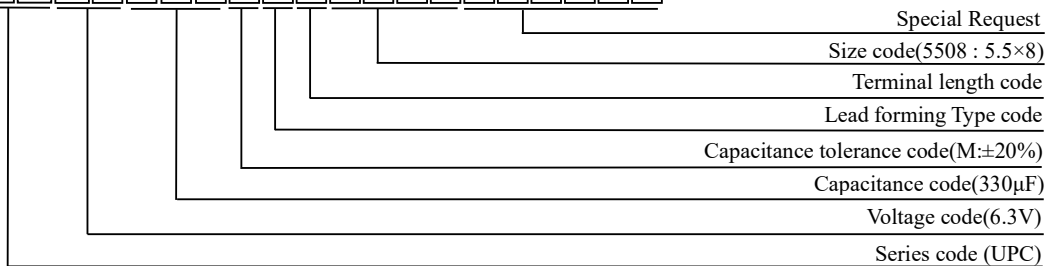
ΦD	5	5.5	6.3	6.3
Φd	0.45	0.45	0.6	0.6
L	8	8~11	8	11~12
α	1	1	1	1.5
F	2.0	2.5	2.5	2.5

### ◆ MARKING



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

U P C 0 J 3 3 1 M N N 5 5 0 8



# CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS



## UPC Series NEW

### ◆ STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case Size (mm) ΦD×L	ESR 100~300KHz (mΩmax)	Rated Ripple current (mArms/ 105°C, 100KHz)	Tanδ max	Leakage Current (μA max)	Part Number
6.3 (0J)	220	5.5×8	12	3600	0.12	300	UPC0J221MNN5508
	330	5.5×8	12	4050	0.12	500	UPC0J331MNN5508
	390	5.5×8	11	3700	0.12	491	UPC0J391MNN5508
	470	5.5×8	12	4200	0.12	592	UPC0J471MNN5508
	560	6.3×8	8	4700	0.12	706	UPC0J561MNN6308
	680	6.3×8	10	4300	0.12	857	UPC0J681MNN6308
	820	6.3×8	8	4700	0.12	1033	UPC0J821MNN6308
	1000	6.3×11	8	5300	0.12	1260	UPC0J102MNN6311
6.8 (6K)	1200	6.3×12	8	5700	0.12	1512	UPC0J122MNN6312
	390	5×8	11	3100	0.12	530	UPC6K391MNN0508
	470	5×8	11	3700	0.12	639	UPC6K471MNN0508
	470	6.3×8	8	4700	0.12	639	UPC6K471MNN6308
	560	6.3×8	8	4700	0.12	761	UPC6K561MNN6308
	680	6.3×8	8	4700	0.12	925	UPC6K681MNN6308
	820	6.3×8	8	4700	0.12	1115	UPC6K821MNN6308
	1000	6.3×12	8	5000	0.12	1360	UPC6K102MNN6312
7.5 (7H)	390	5.5×8	11	3100	0.12	175	UPC7H391MNN5508
	470	5.5×8	10	3700	0.12	705	UPC7H471MNN5508
	500	5.5×9	10	3100	0.12	750	UPC7H501MNN5509
	560	6.3×8	8	4700	0.12	840	UPC7H561MNN6308
12 (1B)	330	6.3×8	8	4700	0.12	792	UPC1B331MNN6308
	470	6.3×11	8	4700	0.12	1128	UPC1B471MNN6311
	560	6.3×11	12	4700	0.12	1344	UPC1B561MNN6311
	820	6.3×12	14	3300	0.12	1968	UPC1B821MNN6312
16 (1C)	180	5.5×10	20	3100	0.12	576	UPC1C181MNN5510
	220	5.5×10	20	3100	0.12	704	UPC1C221MNN5510
	270	5.5×10	20	3100	0.12	864	UPC1C271MNN5510
	330	5.5×11	20	2900	0.12	1056	UPC1C331MNN5511
	330	6.3×11	15	3800	0.12	1056	UPC1C331MNN6311
20 (1D)	150	5.5×8	28	2700	0.12	600	UPC1D151MNN5508
	270	6.3×12	16	3800	0.12	1080	UPC1D271MNN6312
	330	6.3×11	16	3800	0.12	1320	UPC1D331MNN6311
	330	6.3×12	16	3800	0.12	1320	UPC1D331MNN6312
22 (1P)	330	6.3×12	18	3800	0.12	1452	UPC1P331MNN6312