



SPECIFICATION FOR APPROVAL

Date : 2022/6/2

<i>Conductive Polymer Aluminum Solid Capacitor</i>		UPL Series									
Capacitance : 470 μ F	Tolerance : $\pm 20 \%$	Type : 直立式									
Voltage : 50 V DC	Part No. : UPL-470M50V1021										
Dimension (mm)											
		<table border="1"> <tr> <td>ϕ D</td> <td>10 \pm 1.5</td> </tr> <tr> <td>P</td> <td>5.0 \pm 0.5</td> </tr> <tr> <td>L</td> <td>21 \pm 1.5</td> </tr> <tr> <td>d</td> <td>0.6 \pm 0.1</td> </tr> </table>		ϕ D	10 \pm 1.5	P	5.0 \pm 0.5	L	21 \pm 1.5	d	0.6 \pm 0.1
ϕ D	10 \pm 1.5										
P	5.0 \pm 0.5										
L	21 \pm 1.5										
d	0.6 \pm 0.1										
Specification :											
1 Operating Temperature Range	: - 55 $^{\circ}$ C ~ + 125 $^{\circ}$ C										
2 Leakage Current (μ A)	: $I \leq 4700 \mu$ A (After 2 minutes application of rated.)										
3 Surge Voltage DC	: Rated voltage x 1.15 V										
4 Dissipation Factor (Tan δ)	: 0.12 MAX. (20 $^{\circ}$ C/120Hz)										
5 Equivalent series resistance(ESR)	: 28 m Ω MAX. (20 $^{\circ}$ C/100KHz to 300KHz)										
6 Max. Permissible ripple current	: 1700 mA/125 $^{\circ}$ C/100KHz (4250mA/105 $^{\circ}$ C/100KHz)										
7 High temperature & Low temperature characteristic	<table border="1"> <tr> <td>Z(-55$^{\circ}$C)/Z(+20$^{\circ}$C)</td> <td>≤ 1.25</td> </tr> <tr> <td>Z(+125$^{\circ}$C)/Z(+20$^{\circ}$C)</td> <td>≤ 1.25</td> </tr> </table>		Z(-55 $^{\circ}$ C)/Z(+20 $^{\circ}$ C)	≤ 1.25	Z(+125 $^{\circ}$ C)/Z(+20 $^{\circ}$ C)	≤ 1.25					
Z(-55 $^{\circ}$ C)/Z(+20 $^{\circ}$ C)	≤ 1.25										
Z(+125 $^{\circ}$ C)/Z(+20 $^{\circ}$ C)	≤ 1.25										
8 Load Life Test	: The following specifications shall be satisfied when the capacitors are restored to 20 $^{\circ}$ C after the rated voltage is applied for 16V~25V 2000 hours, ≥ 35 V 1500 hours at 125 $^{\circ}$ C. The capacitor shall meet with following limits :										
	<table border="1"> <tr> <td>Capacitance Change</td> <td>$\leq \pm 30\%$ of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>$\leq 300\%$ of specified value</td> </tr> <tr> <td>ESR</td> <td>$\leq 300\%$ of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>\leq initial specified value</td> </tr> </table>			Capacitance Change	$\leq \pm 30\%$ of initial value	Dissipation Factor	$\leq 300\%$ of specified value	ESR	$\leq 300\%$ of specified value	Leakage Current	\leq initial specified value
Capacitance Change	$\leq \pm 30\%$ of initial value										
Dissipation Factor	$\leq 300\%$ of specified value										
ESR	$\leq 300\%$ of specified value										
Leakage Current	\leq initial specified value										
9 High temperature & High humidity : (Constant)	After storing for 1000 hours at 60 $^{\circ}$ C 、90~95% R.H.										
	<table border="1"> <tr> <td>Capacitance Change</td> <td>$\leq \pm 20\%$ of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>$\leq 150\%$ of specified value</td> </tr> <tr> <td>ESR</td> <td>$\leq 150\%$ of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>\leq initial specified value</td> </tr> </table>			Capacitance Change	$\leq \pm 20\%$ of initial value	Dissipation Factor	$\leq 150\%$ of specified value	ESR	$\leq 150\%$ of specified value	Leakage Current	\leq initial specified value
Capacitance Change	$\leq \pm 20\%$ of initial value										
Dissipation Factor	$\leq 150\%$ of specified value										
ESR	$\leq 150\%$ of specified value										
Leakage Current	\leq initial specified value										