



# SPECIFICATION FOR APPROVAL

Date : 2022/6/2

<i>Conductive Polymer Aluminum Solid Capacitor</i>		<b>GPH Series</b>								
Capacitance : 1500 $\mu$ F	Tolerance : $\pm 20 \%$	Type : 直立式								
Voltage : 16 V DC	Part No. : GPH-1500M16V1012									
Dimension (mm)										
		<table border="1"> <tr> <td><math>\phi</math> D</td> <td>10 <math>\pm</math> 1.5</td> </tr> <tr> <td>P</td> <td>5.0 <math>\pm</math> 0.5</td> </tr> <tr> <td>L</td> <td>12 <math>\pm</math> 1.5</td> </tr> <tr> <td>d</td> <td>0.6 <math>\pm</math> 0.1</td> </tr> </table>	$\phi$ D	10 $\pm$ 1.5	P	5.0 $\pm$ 0.5	L	12 $\pm$ 1.5	d	0.6 $\pm$ 0.1
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<b>Specification :</b>										
1 Operating Temperature Range	: - 55 $^{\circ}$ C ~ + 125 $^{\circ}$ C									
2 Leakage Current ( $\mu$ A)	: $I \leq 4800 \mu$ A (After 2 minutes application of rated.)									
3 Surge Voltage DC	: Rated voltage x 1.15 V									
4 Dissipation Factor (Tan $\delta$ )	: 0.12 MAX. (20 $^{\circ}$ C/120Hz)									
5 Equivalent series resistance(ESR)	: 11 m $\Omega$ MAX. (20 $^{\circ}$ C/100KHz to 300KHz)									
6 Max. Permissible ripple current	: 2 2 4 0 mA/125 $^{\circ}$ C/100KHz (6100mA/105 $^{\circ}$ C/100KHz)									
7 High temperature & Low temperature characteristic	<table border="1"> <tr> <td>Z(-55<math>^{\circ}</math>C)/Z(+20<math>^{\circ}</math>C)</td> <td><math>\leq 1.25</math></td> </tr> <tr> <td>Z(+125<math>^{\circ}</math>C)/Z(+20<math>^{\circ}</math>C)</td> <td><math>\leq 1.25</math></td> </tr> </table>		Z(-55 $^{\circ}$ C)/Z(+20 $^{\circ}$ C)	$\leq 1.25$	Z(+125 $^{\circ}$ C)/Z(+20 $^{\circ}$ C)	$\leq 1.25$				
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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, $\geq 35$ V 1500 hours at 125 $^{\circ}$ C. The capacitor shall meet with following limits : <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance Change</td> <td><math>\leq \pm 30\%</math> of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td><math>\leq 300\%</math> of specified value</td> </tr> <tr> <td>ESR</td> <td><math>\leq 300\%</math> of specified value</td> </tr> <tr> <td>Leakage Current</td> <td><math>\leq</math> 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
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9 High temperature & High humidity : (Constant)	After storing for 1000 hours at 60 $^{\circ}$ C 、90~95% R.H. <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance Change</td> <td><math>\leq \pm 20\%</math> of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td><math>\leq 150\%</math> of specified value</td> </tr> <tr> <td>ESR</td> <td><math>\leq 150\%</math> of specified value</td> </tr> <tr> <td>Leakage Current</td> <td><math>\leq</math> 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
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