



# SPECIFICATION FOR APPROVAL

Date : 2022/6/2

<i>Conductive Polymer Aluminum Solid Capacitor</i>		<b>GPL Series</b>									
Capacitance : 220 $\mu$ F	Tolerance : $\pm 20 \%$	Type : 直立式									
Voltage : 35 V DC	Part No. : GPL-220M35V0812										
Dimension (mm)											
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<b>Specification :</b>											
1 Operating Temperature Range	:	- 55 $^{\circ}$ C ~ + 125 $^{\circ}$ C									
2 Leakage Current ( $\mu$ A)	:	$I \leq 1540 \mu$ 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)	:	26 m $\Omega$ MAX. (20 $^{\circ}$ C/100KHz to 300KHz)									
6 Max. Permissible ripple current	:	1180 mA/125 $^{\circ}$ C/100KHz (2950mA/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, $\geq$ 35V 1500 hours at 125 $^{\circ}$ C. The capacitor shall meet with following limits : <table border="1"> <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"> <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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