



SPECIFICATION FOR APPROVAL

Date : 2022/6/2

<i>Conductive Polymer Aluminum Solid Capacitor</i>		GPL Series								
Capacitance : 47 μ F	Tolerance : $\pm 20 \%$	Type : 直立式								
Voltage : 63 V DC	Part No. : GPL-47M63V0812									
Dimension (mm)										
		<table border="1"> <tr> <td>ϕ D</td> <td>8 \pm 1.5</td> </tr> <tr> <td>P</td> <td>3.5 \pm 0.5</td> </tr> <tr> <td>L</td> <td>12 \pm 1.5</td> </tr> <tr> <td>d</td> <td>0.6 \pm 0.1</td> </tr> </table>	ϕ D	8 \pm 1.5	P	3.5 \pm 0.5	L	12 \pm 1.5	d	0.6 \pm 0.1
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Specification :										
1 Operating Temperature Range	: - 55 $^{\circ}$ C ~ + 125 $^{\circ}$ C									
2 Leakage Current (μ A)	: $I \leq 592 \mu$ 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)	: 32 m Ω MAX. (20 $^{\circ}$ C/100KHz to 300KHz)									
6 Max. Permissible ripple current	: 840 mA/125 $^{\circ}$ C/100KHz (2100mA/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				
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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" style="margin-left: 20px;"> <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
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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>$\leq \pm 20\%$ 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
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