



SPECIFICATION FOR APPROVAL

Date : 2022/05/26

<i>Conductive Polymer Aluminum Solid Capacitor</i>		GPT Series								
Capacitance : 1000 μ F	Tolerance : $\pm 20\%$	Type : Radial								
Voltage : 6.3 V DC	Part No. : GPT-1000M6.3V0808									
Dimension (mm)										
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">ϕ D</td> <td style="text-align: center;">8 ± 0.5</td> </tr> <tr> <td>P</td> <td style="text-align: center;">3.5 ± 0.5</td> </tr> <tr> <td>L</td> <td style="text-align: center;">8 ± 1.5</td> </tr> <tr> <td>d</td> <td style="text-align: center;">0.6 ± 0.1</td> </tr> </table>	ϕ D	8 ± 0.5	P	3.5 ± 0.5	L	8 ± 1.5	d	0.6 ± 0.1
ϕ D	8 ± 0.5									
P	3.5 ± 0.5									
L	8 ± 1.5									
d	0.6 ± 0.1									
Specification :										
1 Operating Temperature Range	: $-55\text{ }^{\circ}\text{C} \sim +105\text{ }^{\circ}\text{C}$									
2 Leakage Current (μ A)	: $I \leq 1260\text{ }\mu\text{A}$ (After 2 minutes application of rated.)									
3 Surge Voltage DC	: Rated voltage x 1.15 V									
4 Dissipation Factor (Tan δ)	: 0.10 MAX. (20 $^{\circ}$ C/120Hz)									
5 Equivalent series resistance(ESR)	: 8 m Ω MAX. (20 $^{\circ}$ C/100KHz to 300KHz)									
6 Max. Permissible ripple current	: 5700 mA/105 $^{\circ}$ C/100KHz									
7 Low Temperature Characteristic (Max Impedance Ratio)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">$Z(-25\text{ }^{\circ}\text{C})/Z(+20\text{ }^{\circ}\text{C})$</td> <td style="text-align: center;">≤ 1.15</td> </tr> <tr> <td>$Z(+55\text{ }^{\circ}\text{C})/Z(+20\text{ }^{\circ}\text{C})$</td> <td style="text-align: center;">≤ 1.25</td> </tr> </table>		$Z(-25\text{ }^{\circ}\text{C})/Z(+20\text{ }^{\circ}\text{C})$	≤ 1.15	$Z(+55\text{ }^{\circ}\text{C})/Z(+20\text{ }^{\circ}\text{C})$	≤ 1.25				
$Z(-25\text{ }^{\circ}\text{C})/Z(+20\text{ }^{\circ}\text{C})$	≤ 1.15									
$Z(+55\text{ }^{\circ}\text{C})/Z(+20\text{ }^{\circ}\text{C})$	≤ 1.25									
8 Load Life Test	: After 5000 hours application of W.V. at 105 $^{\circ}$ C and the being stabilized at 20 $^{\circ}$ C. The capacitor shall meet with following limits :									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Capacitance Change</td> <td style="text-align: center;">$\leq \pm 20\%$ of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td style="text-align: center;">$\leq 150\%$ of specified value</td> </tr> <tr> <td>ESR</td> <td style="text-align: center;">$\leq 150\%$ of specified value</td> </tr> <tr> <td>Leakage Current</td> <td style="text-align: center;">\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									
9 High temperature & High humidity : (Constant)	After storing for 1000 hours at 60 $^{\circ}$ C 、90~95% R.H.									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Capacitance Change</td> <td style="text-align: center;">$\leq \pm 20\%$ of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td style="text-align: center;">$\leq 150\%$ of specified value</td> </tr> <tr> <td>ESR</td> <td style="text-align: center;">$\leq 150\%$ of specified value</td> </tr> <tr> <td>Leakage Current</td> <td style="text-align: center;">\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									