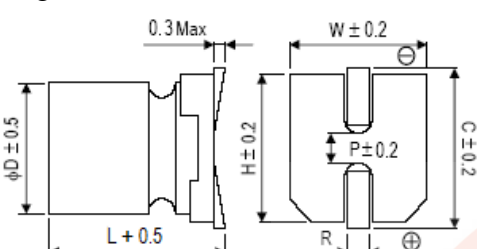
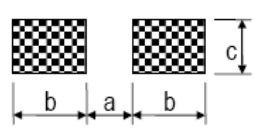


SPECIFICATION FOR APPROVAL

<i>Conductive Polymer Aluminum Solid Capacitor</i>		GMS Series																																								
Capacitance : 220 μ F	Tolerance : $\pm 20\%$	Type : SMD																																								
Voltage : 25 V DC	Dimension : 8 x 9	Part No. : GMS-220M25V0809																																								
<p>Diagram of Dimension & Recommended land pattern (mm)</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <table border="1" style="border-collapse: collapse; text-align: center;"> <thead> <tr> <th>ϕ DxL</th> <th>W</th> <th>H</th> <th>C</th> <th>R</th> <th>P</th> </tr> </thead> <tbody> <tr> <td>6.3x6.5</td> <td>6.6</td> <td>6.6</td> <td>7.2</td> <td>0.5 to 0.8</td> <td>2.1</td> </tr> <tr> <td>8x9</td> <td>8.3</td> <td>8.3</td> <td>9.0</td> <td>0.8 to 1.1</td> <td>3.2</td> </tr> <tr> <td>10x10.5</td> <td>10.3</td> <td>10.3</td> <td>11.0</td> <td>0.8 to 1.1</td> <td>4.6</td> </tr> </tbody> </table> <table border="1" style="border-collapse: collapse; text-align: center;"> <thead> <tr> <th>ϕ DxL</th> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>6.3x6.5</td> <td>1.9</td> <td>3.5</td> <td>1.6</td> </tr> <tr> <td>8x9</td> <td>2.8</td> <td>4.2</td> <td>2.2</td> </tr> <tr> <td>10x10.5</td> <td>4.3</td> <td>4.4</td> <td>2.2</td> </tr> </tbody> </table> </div>			ϕ DxL	W	H	C	R	P	6.3x6.5	6.6	6.6	7.2	0.5 to 0.8	2.1	8x9	8.3	8.3	9.0	0.8 to 1.1	3.2	10x10.5	10.3	10.3	11.0	0.8 to 1.1	4.6	ϕ DxL	a	b	c	6.3x6.5	1.9	3.5	1.6	8x9	2.8	4.2	2.2	10x10.5	4.3	4.4	2.2
ϕ DxL	W	H	C	R	P																																					
6.3x6.5	6.6	6.6	7.2	0.5 to 0.8	2.1																																					
8x9	8.3	8.3	9.0	0.8 to 1.1	3.2																																					
10x10.5	10.3	10.3	11.0	0.8 to 1.1	4.6																																					
ϕ DxL	a	b	c																																							
6.3x6.5	1.9	3.5	1.6																																							
8x9	2.8	4.2	2.2																																							
10x10.5	4.3	4.4	2.2																																							
Specification																																										
1 Operating Temperature Range :	- 55 To + 105 °C																																									
2 Capacitance Tolerance :	$\pm 20\%$ (20°C, 120Hz)																																									
3 Leakage Current :	$I \leq 1100 \mu A$ (after 2 minutes)																																									
4 Surge Voltage DC :	Rated voltage x 1.15 V																																									
5 Dissipation Factor (Tan δ) :	0.12 MAX (20°C, 120Hz)																																									
6 ESR :	25 m Ω MAX. (20°C/100KHz to 300KHz)																																									
7 Ripple Current :	3200 mA (105°C, 100KHz)																																									
8 Load Life Test : After 5000 hours at 105°C, The capacitor shall meet with following limits :	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <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> </tbody> </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 Moisture Resistance :	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them at 60°C, RH90~95% for 1000 hours.																																									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <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> </tbody> </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																																									