



SPECIFICATION FOR APPROVAL

Date : 2022/6/2

| <i>Conductive Polymer Aluminum Solid Capacitor</i> | | GPL Series | | | | | | | | | |
|---|---|---|---|--------------------|--|--------------------|---------------------------------|-----|---------------------------------|-----------------|--------------------------------|
| Capacitance : 33 μ F | Tolerance : $\pm 20 \%$ | Type : 直立式 | | | | | | | | | |
| Voltage : 100 V DC | Part No. : GPL-33M100V1012 | | | | | | | | | | |
| Dimension (mm) | | | | | | | | | | | |
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| Specification : | | | | | | | | | | | |
| 1 Operating Temperature Range | : - 55 $^{\circ}$ C ~ + 125 $^{\circ}$ C | | | | | | | | | | |
| 2 Leakage Current (μ A) | : $I \leq 660 \mu$ 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) | : 38 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, ≥ 35 V 1500 hours at 125 $^{\circ}$ C. The capacitor shall meet with following limits : | | | | | | | | | | |
| | <table border="1"> <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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| 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. | | | | | | | | | | |
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