

DYNACAP – Double Layer Capacitor

DB Series

Has a total withstand voltage rating of 5.5V. Utilizing ELNA's unique flat spring technology, which enhances the reliability of the internal coin cells, this series is ideal for a wide range of applications from consumer appliances to sophisticated instrumentation.



Construction and Dimensions

| CAP (F) | ∅D x L (mm) |
|---------|-------------|
| 0.047 | 13.5 x 7.5 |
| 0.1 | |
| 0.22 | |
| 0.33 | |
| 0.47 | 21.5 x 8.0 |
| 1.0 | |

Unit: mm

Only Available in L Shape Terminal Lead

| Specifications | Performance | | | | | | | | | | | | | | |
|-------------------------------------|--|-----------------------|------------------------------|-----------------------|---|---------------------|---|-----|-------------------------|-----|----|----|----|----|----|
| Temperature range (°C) | -25 to +70 | | | | | | | | | | | | | | |
| Capacitance tolerance (%) | -20 to +80 | | | | | | | | | | | | | | |
| Internal resistance | <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Capacitance (F)</th> <th>0.047</th> <th>0.1</th> <th>0.22</th> <th>0.33</th> <th>0.47</th> <th>1.0</th> </tr> </thead> <tbody> <tr> <td>Internal resistance (Ω)</td> <td>120</td> <td>75</td> <td>75</td> <td>75</td> <td>30</td> <td>30</td> </tr> </tbody> </table> | Capacitance (F) | 0.047 | 0.1 | 0.22 | 0.33 | 0.47 | 1.0 | Internal resistance (Ω) | 120 | 75 | 75 | 75 | 30 | 30 |
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| Internal resistance (Ω) | 120 | 75 | 75 | 75 | 30 | 30 | | | | | | | | | |
| Stability at low & high temperature | <table border="1" style="width: 100%;"> <tbody> <tr> <td>Change in capacitance</td> <td>Within ±30% of value at 20°C</td> </tr> <tr> <td>Internal resistance</td> <td>Less than five times of the value at 20°C</td> </tr> </tbody> </table> | Change in capacitance | Within ±30% of value at 20°C | Internal resistance | Less than five times of the value at 20°C | | | | | | | | | | |
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| Endurance (70°C) | <table border="1" style="width: 100%;"> <tbody> <tr> <td>Test time</td> <td>1000 hrs</td> </tr> <tr> <td>Change in capacitance</td> <td>Within ±30% of the initial measured value</td> </tr> <tr> <td>Internal resistance</td> <td>Within four times the initial specified value</td> </tr> </tbody> </table> | Test time | 1000 hrs | Change in capacitance | Within ±30% of the initial measured value | Internal resistance | Within four times the initial specified value | | | | | | | | |
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| Internal resistance | Within four times the initial specified value | | | | | | | | | | | | | | |
| Max. storage temp. (70°C) | Test time 1000hrs. Same as Endurance | | | | | | | | | | | | | | |

Standard Ratings

| ELNA Part No. | Rated Volt (V) | Capacitance (F) | Internal Resistance (Ω) |
|---------------|----------------|-----------------|-------------------------|
| DB-5R5D473 | 5.5 | 0.047 | ≤120 |
| DB-5R5D104 | 5.5 | 0.1 | ≤75 |
| DB-5R5D224 | 5.5 | 0.22 | ≤75 |
| DB-5R5D334 | 5.5 | 0.33 | ≤75 |
| DB-5R5D474 | 5.5 | 0.47 | ≤30 |
| DB-5R5D105 | 5.5 | 1.0 | ≤30 |

Dynacap

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