NEW PRODUCT INFORMATION

New High Speed Decoupling Device

Proadlizer® PF/A Series

APPLICATION

- High speed and high power CPU and Gbps backplane decoupling
- EMI solution for 10 MHz range or above
- High switching frequency DC/DC converter output capacitor

FEATURES

- Excellent noise absorption performance at GHz frequency
- Extreme low ESL and high current capability
- High Capacitance and very low ESR based on our Conductive Polymer technology
- Distributed capacitance architecture and transmission-line structure

PERFORMANCE (reference)

- Attenuation (S21) *—frequency characteristics

DIMENSIONS [mm]

LAYOUT LAND PATTERN (Tentative)

NOTE (reference)

- Ex. 1: An effective filtering performance can be achieved by separating input and output in the VCC layer.
- Ex. 2: An effective decoupling performance can be achieved by not separating VCC layer. This method also makes surface mounting of loads (CPU etc.) efficient.

NOTE

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**PART NUMBER SYSTEM**

| PFA F25 0E 128 M TE |

- Tape & Reel Container
- Capacitance tolerance: ±120%
- Capacitance (128±100 μF): First two digits represent significant figures. Third digit represents number of zeros to follow. Rated voltage: (OE: 2.5V, OG: 4V)

**MARKING**

- [F25 case]
- [D20 case]

**RATINGS**

<table>
<thead>
<tr>
<th>Rated voltage</th>
<th>Capacitance</th>
<th>Rated voltage</th>
<th>Capacitance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>33</td>
<td>5</td>
<td>0.3</td>
</tr>
<tr>
<td>2.5</td>
<td>100</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>22</td>
<td>5</td>
<td>0.4</td>
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<tr>
<td>4</td>
<td>47</td>
<td>5</td>
<td>18.8</td>
</tr>
<tr>
<td>2.5</td>
<td>300</td>
<td>30</td>
<td>75</td>
</tr>
<tr>
<td>2.5</td>
<td>1200</td>
<td>10</td>
<td>300</td>
</tr>
</tbody>
</table>

* Under development

**PERFORMANCE**

<table>
<thead>
<tr>
<th>No</th>
<th>Test Item</th>
<th>Performance</th>
<th>Test Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operating Temperature</td>
<td>0°C to +105°C</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rater Voltage</td>
<td>±2.5V, ±4V</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Capacity</td>
<td>±25μF to ±120μF</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Capacitance tolerance</td>
<td>±20%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>DC Leakage Current</td>
<td>Under 0.05V</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Dielectric Strength (BP)</td>
<td>200V</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>ESR</td>
<td>Under 0.1Ω</td>
<td></td>
</tr>
</tbody>
</table>

**RATING (Initial specification)**

- Temperature Stability
- Voltage Stability
- Moisture Resistance
- Shock Resistance

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