PERFORMANCE SPECIFICATION SHEET

CAPACITOR, CHIP, FIXED, CERAMIC DIELECTRIC (GENERAL PURPOSE),
EXTENDED RANGE, HIGH RELIABILITY AND STANDARD RELIABILITY,
SIZE 0201

This specification sheet is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall
consist of this specification sheet and MIL-PRF-32535.

Dimensions

<table>
<thead>
<tr>
<th>L</th>
<th>W</th>
<th>T</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>± .003</td>
<td>± .001</td>
<td>Max.</td>
<td>Min.</td>
</tr>
</tbody>
</table>

.024 .011 .013 .004

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Dimensions and tolerances are for terminated chips.
4. Minimum spacing between metalized end terminals is .008 inch (0.20 mm).

FIGURE 1. Size 0201 capacitors.
**REQUIREMENTS:**

Dimensions and configuration: See figure 1.

Capacitance value: See table I.

Capacitance tolerance: See table I.

Voltage-temperature limit or temperature characteristic (VTL/TC): X7R as specified in MIL-PRF-32535.

Rated voltage ($V_{dc}$): $V = 4; W = 6.3; X = 10$. See table I for maximum rated voltage available for each capacitance value.

Operating temperature range: -55°C to +125°C.


Electrode: P as specified in MIL-PRF-32535.

Product level designator: Standard reliability – M and high reliability - T.

Marking: Package marking only in accordance with MIL-PRF-32535.

<table>
<thead>
<tr>
<th>Part or Identifying Number (PIN) 1/</th>
<th>Capacitance (pF)</th>
<th>Capacitance tolerance</th>
<th>VTL/TC</th>
<th>Rated voltage 2/ ($V_{dc}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M3253501E2 - 102 - - - P</td>
<td>1,000</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 122 - - - P</td>
<td>1,200</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 152 - - - P</td>
<td>1,500</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 182 - - - P</td>
<td>1,800</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 222 - - - P</td>
<td>2,200</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 272 - - - P</td>
<td>2,700</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 332 - - - P</td>
<td>3,300</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 392 - - - P</td>
<td>3,900</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 472 - - - P</td>
<td>4,700</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 562 - - - P</td>
<td>5,600</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 682 - - - P</td>
<td>6,800</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 822 - - - P</td>
<td>8,200</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
<tr>
<td>M3253501E2 - 103 - - - P</td>
<td>10,000</td>
<td>K, M</td>
<td>X7R</td>
<td>10</td>
</tr>
</tbody>
</table>

1/ The complete PIN shall include additional symbols to indicate voltage, capacitance tolerance, termination finish, and product level.

2/ This is the maximum rated voltage available. All lower voltage ratings are also available.

Amendment notations: The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.
Custodians:
Army – CR
Navy - EC
Air Force – 85
DLA - CC

Preparing activity:
DLA - CC (Project 5910-2017-046)

Review activities:
Army - MI
Navy - AS, MC, OS, SH
Air Force - 19, 99
Other – MDA, NA

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