Types CD17, CD18 & CDV18, High-Frequency, Mica Capacitors

High-Frequency Capacitors for CATV and RF Applications

Types CD17 and CD18 assure controlled, resonance-free performance through 1 GHz. Insertion loss data is typically flat within ±0.1 dB over the entire frequency range, and is specified to be flat within ±0.2 dB. Interchangeable with the most popular, common mica capacitors, Type CD17 is available in the same case sizes and lead spacing as CD15; CD18, in the same case sizes and lead spacing as CD19, and CDV18, in the same as CDV19.

Highlights

- Shockproof and delamination free
- Near zero capacitance change with (t), (V) and (f)
- Very high Q at UHF/VHF frequencies
- 0.0005 typical dissipation factor
- 100,000 V/μs dV/dt capability minimum
- Low, notch-free impedance to beyond 1 GHz
- Ultra low ESR for cool operation

Specifications

- **Capacitance Range**: 1 pF to 5,100 pF
- **Capacitance Tolerance**: ±1/2 pF (D), ±1 pF (C), ±1/2% (E), ±1% (F), ±2% (G), ±5% (J)
- **Rated Voltage**: 100 Vdc to 1,000 Vdc
- **Operating Temperature Range**: −55 ºC to +150 ºC

RoHS Compliant

Typical Performance Curves

Insertion Loss vs. Frequency for CD17PC621J03, 75 Ω System

ESR vs. Frequency
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<table>
<thead>
<tr>
<th>Cap. (pF)</th>
<th>Catalog Number</th>
<th>Volt</th>
<th>L (in mm)</th>
<th>H (in mm)</th>
<th>T (in mm)</th>
<th>S (in mm)</th>
<th>d (in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>CD17FD072JO3F</td>
<td>500</td>
<td>470 (11.9)</td>
<td>390 (9.9)</td>
<td>210 (5.3)</td>
<td>234 (5.9)</td>
<td>025 (6)</td>
</tr>
<tr>
<td>500</td>
<td>CD18FD072JO3F</td>
<td>500</td>
<td>460 (11.4)</td>
<td>360 (9.1)</td>
<td>170 (4.7)</td>
<td>234 (5.9)</td>
<td>025 (6)</td>
</tr>
</tbody>
</table>

### Ratings

- **Cap. (pF)**: The capacitance value in picofarads.
- **Catalog Number**: The catalog number for each capacitor.
- **Volt**: The voltage rating of the capacitor.
- **L**: The length of the capacitor in millimeters.
- **H**: The height of the capacitor in millimeters.
- **T**: The thickness of the capacitor in millimeters.
- **S**: The width of the capacitor in millimeters.
- **d**: The thickness of the dielectric in millimeters.

For more details, please refer to Cornell Dubilier's catalog at www.cde.com.
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