Common Mode Chokes – PFD2015

- Miniature surface mount component, only 2.2 x 1.45 mm footprint and 1.5 mm tall
- Ideal for use in both power line and signal line applications
- Common- and differential-mode filtering in a single device
- Up to 550 MHz differential mode cutoff frequency
- Can also be used as coupled inductors for SEPIC applications

Core material: Ferrite
Environmental: RoHS compliant, halogen free
Weight: 13 – 23 mg
Terminations: Silver-palladium-platinum-glass frit.
Ambient temperature: –40°C to +125°C
Storage temperature: Component: –40°C to +125°C.
Tape and reel packaging: –40°C to +80°C
Winding to winding isolation: 250 Vrms, one minute
Resistance to soldering heat: Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles
Moisture Sensitivity Level (MSL): 1 (unlimited floor life at <30°C / 85% relative humidity)
Failures in Time (FIT) / Mean Time Between Failures (MTBF): 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging: 2000/7” reel; 7500/13” reel Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.63 mm pocket depth

<table>
<thead>
<tr>
<th>Partnumber1</th>
<th>Common Mode peak impedance (kOhms)</th>
<th>Cutoff frequency2 (MHz)</th>
<th>Inductance (µH)3</th>
<th>DCR max4 (Ohms)</th>
<th>Isolation5 (Vrms)</th>
<th>Irms6 (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFD2015-102ME_</td>
<td>2.30 @ 400 MHz</td>
<td>550</td>
<td>0.80</td>
<td>1.0</td>
<td>0.165</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-122ME_</td>
<td>3.45 @ 350 MHz</td>
<td>560</td>
<td>0.96</td>
<td>1.2</td>
<td>0.175</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-182ME_</td>
<td>4.21 @ 510 MHz</td>
<td>350</td>
<td>1.44</td>
<td>1.8</td>
<td>0.294</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-272ME_</td>
<td>6.16 @ 660 MHz</td>
<td>380</td>
<td>2.16</td>
<td>2.7</td>
<td>0.477</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-332ME_</td>
<td>7.14 @ 610 MHz</td>
<td>330</td>
<td>2.64</td>
<td>3.3</td>
<td>0.670</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-472ME_</td>
<td>9.78 @ 460 MHz</td>
<td>230</td>
<td>3.76</td>
<td>4.7</td>
<td>1.00</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-682ME_</td>
<td>14.16 @ 290 MHz</td>
<td>260</td>
<td>5.44</td>
<td>6.8</td>
<td>1.75</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-822ME_</td>
<td>13.81 @ 250 MHz</td>
<td>170</td>
<td>6.56</td>
<td>8.2</td>
<td>2.50</td>
<td>250</td>
</tr>
<tr>
<td>PFD2015-103ME_</td>
<td>14.73 @ 470 MHz</td>
<td>220</td>
<td>8.00</td>
<td>10</td>
<td>3.40</td>
<td>250</td>
</tr>
</tbody>
</table>

1. When ordering, please specify termination and packaging codes:

   **Termination:** E = RoHS compliant silver-palladium-platinum-glass frit.
   **Special order:** R = RoHS compliant matte tin over nickel over silver-platinum-glass frit.
   **Packaging:** C = 7” machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).
   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
   D = 13” machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).

2. Frequency at which the differential mode attenuation equals ~3 dB
3. Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent.
4. DCR is for each winding.
5. Interwinding isolation (hipot) tested for one minute.
6. Current that causes a 40°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Dimensions are in inches mm

© Coilcraft Inc. 2018

This product may not be used in medical or high risk applications without prior Coilcraft approval.
Specification subject to change without notice.
Please check web site for latest information.
Common Mode Chokes – PFD2015 Series

Typical Attenuation (Ref: 50 Ohms)

Typical Impedance vs Frequency