# Wideband Transformers – PFD3215

- Typical applications are as impedance or isolation transformer
- Can be used for balanced to unbalanced (balun) conversion
- 1/4 Watt input RF power rating
- Low DCR values

## Core material
Ferrite

## Environmental
RoHS compliant, halogen free

## Weight
18 – 28 mg

## Termination
RoHS compliant silver-palladium-platinum-glass frit.

## Ambient temperature
–40°C to +85°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, 0.20 mm thick, 4 mm pocket spacing, 1.21 mm pocket depth
- PCB washing: Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCBt_Washing.pdf

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### Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Bandwidth (MHz)</th>
<th>Insertion loss max (dB)</th>
<th>L min (µH)</th>
<th>DCR max (Ohms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFD3215-391ME</td>
<td>12.6 – 645</td>
<td>0.6</td>
<td>0.31</td>
<td>0.070</td>
</tr>
<tr>
<td>PFD3215-102ME</td>
<td>4.0 – 500</td>
<td>0.4</td>
<td>0.80</td>
<td>0.123</td>
</tr>
<tr>
<td>PFD3215-182ME</td>
<td>2.2 – 300</td>
<td>0.5</td>
<td>1.4</td>
<td>0.250</td>
</tr>
<tr>
<td>PFD3215-222ME</td>
<td>2.0 – 370</td>
<td>0.4</td>
<td>1.7</td>
<td>0.285</td>
</tr>
<tr>
<td>PFD3215-332ME</td>
<td>1.2 – 310</td>
<td>0.6</td>
<td>2.6</td>
<td>0.335</td>
</tr>
<tr>
<td>PFD3215-472ME</td>
<td>0.9 – 250</td>
<td>0.5</td>
<td>3.7</td>
<td>0.442</td>
</tr>
<tr>
<td>PFD3215-682ME</td>
<td>0.8 – 150</td>
<td>0.5</td>
<td>5.4</td>
<td>0.600</td>
</tr>
<tr>
<td>PFD3215-103ME</td>
<td>0.4 – 150</td>
<td>0.5</td>
<td>8.0</td>
<td>1.25</td>
</tr>
</tbody>
</table>

1. When ordering, please specify packaging code:

**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. Inductance is for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent.

3. DCR is for each winding.

4. Electrical specifications at 25°C.

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

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**Dimensions are in inches**

![Recommended Land Pattern](image)

- Recommended Land Pattern
- Dimensions are in inches
- **0.028**: 0.711
- **0.030**: 0.762
- **0.088**: 2.24
- **0.014 ±0.003**: 0.356 ±0.0762
- **0.024**: 0.610
- **0.092**: 2.33
- **0.078**: 1.98
- **0.006**: 0.15
- **0.0131**: 3.32
- **0.0105**: 0.60

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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.
PFD3215 Wideband Transformers

Typical Wideband Response Curves