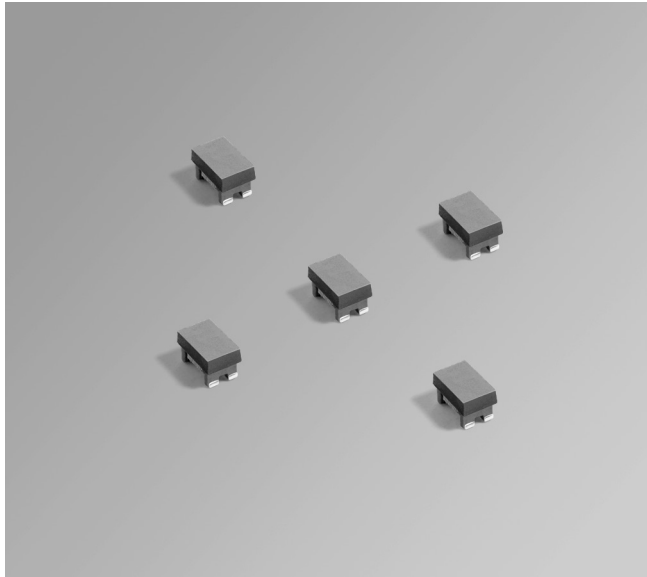


# Common Mode Chokes – PFD2015



- Miniature surface mount component, only 2.2 × 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

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Partnumber <sup>1</sup>	Common Mode peak impedance (kOhms)	Cutoff frequency <sup>2</sup> (MHz)	Inductance (µH) <sup>3</sup>		DCR max <sup>4</sup> (Ohms)	Isolation <sup>5</sup> (Vrms)	Irms <sup>6</sup> (A)
			min	nom			
PFD2015-102ME_	2.30 @ 400 MHz	550	0.80	1.0	0.165	250	0.800
PFD2015-122ME_	3.45 @ 350 MHz	560	0.96	1.2	0.175	250	0.750
PFD2015-182ME_	4.21 @ 510 MHz	350	1.44	1.8	0.294	250	0.490
PFD2015-272ME_	6.16 @ 660 MHz	380	2.16	2.7	0.477	250	0.410
PFD2015-332ME_	7.14 @ 610 MHz	330	2.64	3.3	0.670	250	0.370
PFD2015-472ME_	9.78 @ 460 MHz	230	3.76	4.7	1.00	250	0.260
PFD2015-682ME_	14.18 @ 290 MHz	260	5.44	6.8	1.75	250	0.187
PFD2015-822ME_	13.81 @ 250 MHz	170	6.56	8.2	2.50	250	0.150
PFD2015-103ME_	14.73 @ 470 MHz	220	8.00	10	3.40	250	0.130

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

**PFD2015-103MEC**

**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.

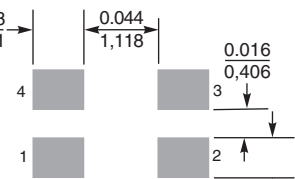
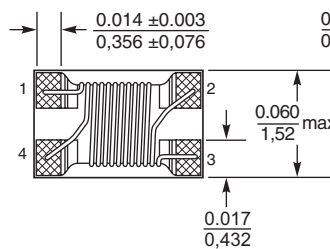
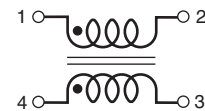
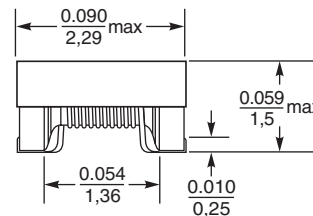
4 DCR is for each winding.

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.

t. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



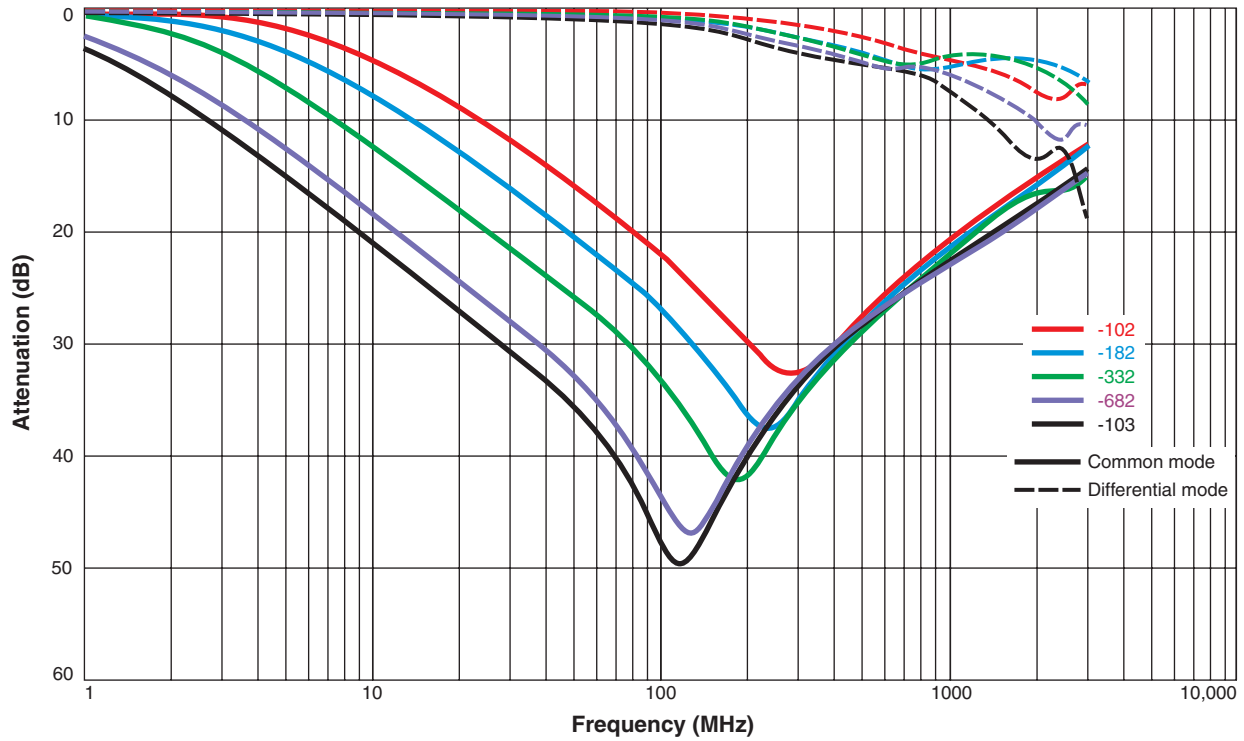
Dimensions are in inches/mm

**Recommended Land Pattern**

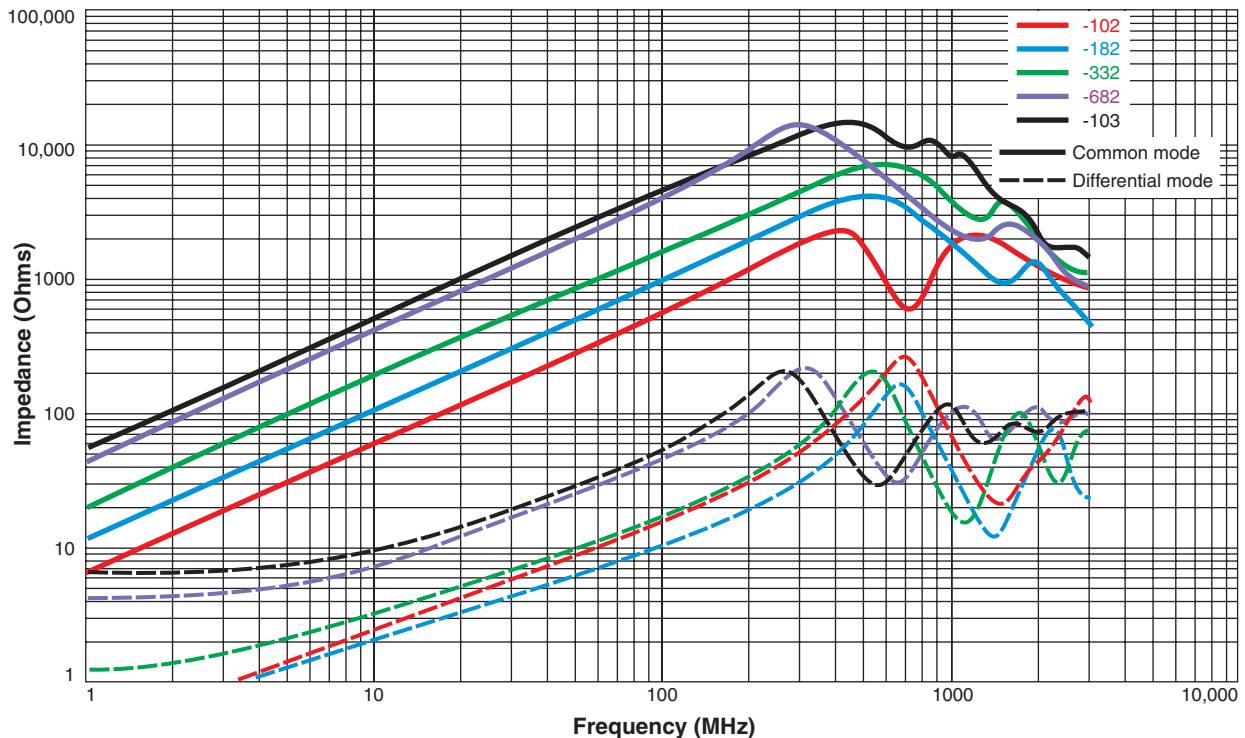


# Common Mode Chokes – PFD2015 Series

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



**US** +1-847-639-6400 sales@coilcraft.com  
**UK** +44-1236-730595 sales@coilcraft-europe.com  
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw  
**China** +86-21-6218 8074 sales@coilcraft.com.cn  
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

Document 1005C-2 Revised 05/24/18  
 © 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.