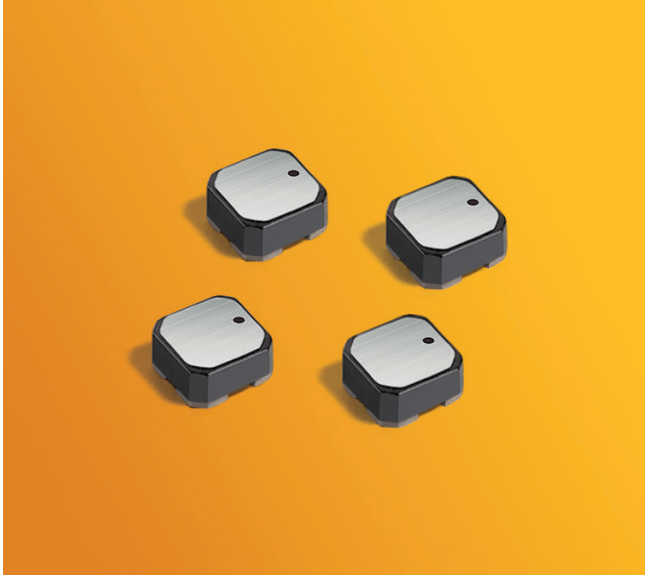


NEW!

Common Mode Chokes for Critical Applications ML412PJD



- Only 1.4 mm high and 3 mm square
- Ideal for use in both power line and signal line applications
- Common- and differential-mode filtering in a single device
- Up to 540 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications

Core material Ferrite

Weight 48 – 66 mg

Terminations Silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Ambient temperature –55°C to +105°C with Irms current

Maximum part temperature +155°C (ambient + temp rise).

Storage temperature Component: –55°C to +155°C.

Packaging: –55°C to +80°C

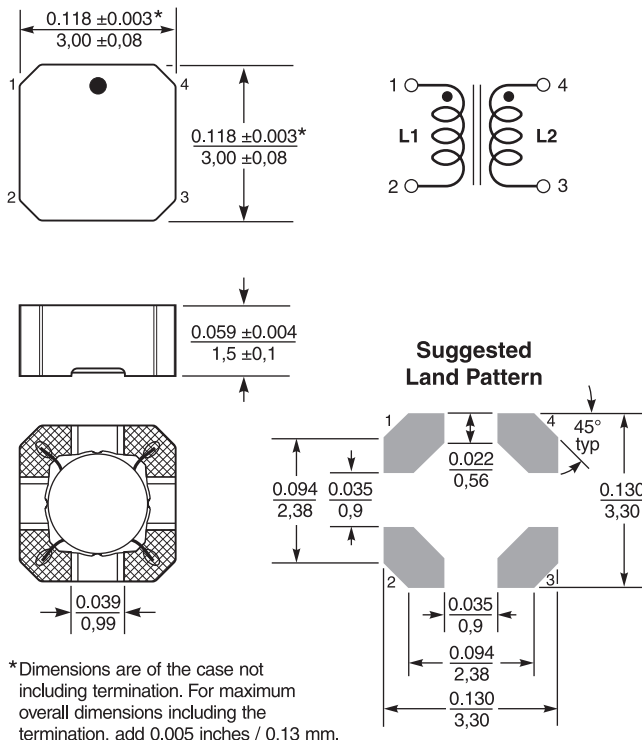
Winding to winding isolation 100 Vrms, one minute

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)

Recommended pick and place nozzle OD: 3 mm; ID: ≤ 1.5 mm

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

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Document ML1324-1 Revised 01/11/24

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

ML412PJD Series Common Mode Chokes

Partnumber ¹	Common mode impedance max (kOhms)	Cutoff frequency ² (MHz)	Inductance (μ H) ³		DCR max ⁴ (Ohms)	Isolation ⁵ (Vrms)	I _{rms} ⁶ (A)
			min	nom			
ML412PJD391NLZ	1.03 @ 330 MHz	540	0.273	0.39	0.071	100	1.45
ML412PJD561MLZ	1.44 @ 240 MHz	540	0.448	0.56	0.079	100	1.37
ML412PJD102MLZ	2.43 @ 160 MHz	330	0.800	1.0	0.129	100	1.08
ML412PJD152MLZ	3.56 @ 130 MHz	330	1.20	1.5	0.204	100	0.86
ML412PJD182MLZ	4.37 @ 110 MHz	280	1.44	1.8	0.273	100	0.78
ML412PJD222MLZ	4.67 @ 100 MHz	330	1.76	2.2	0.300	100	0.75
ML412PJD332MLZ	7.28 @ 81 MHz	220	2.64	3.3	0.337	100	0.67
ML412PJD472MLZ	10.7 @ 66 MHz	210	3.76	4.7	0.503	100	0.54
ML412PJD682MLZ	12.1 @ 54 MHz	290	5.44	6.8	0.622	100	0.49
ML412PJD103MLZ	17.8 @ 47 MHz	330	8.00	10	1.040	100	0.38
ML412PJD153MLZ	22.6 @ 33 MHz	140	12.0	15	1.420	100	0.32
ML412PJD183MLZ	29.0 @ 31 MHz	94	14.4	18	1.550	100	0.31
ML412PJD223MLZ	27.3 @ 24 MHz	88	17.6	22	1.89	100	0.28
ML412PJD333MLZ	41.1 @ 21 MHz	59	26.4	33	2.84	100	0.23
ML412PJD473MLZ	48.7 @ 18 MHz	50	37.6	47	4.03	100	0.19
ML412PJD683MLZ	64.5 @ 14 MHz	48	54.4	68	6.11	100	0.16
ML412PJD104MLZ	94.7 @ 13 MHz	47	80.0	100	8.54	100	0.13
ML412PJD124MLZ	116 @ 11 MHz	37	96.0	120	9.23	100	0.13
ML412PJD154MLZ	135 @ 9.3 MHz	27	120	150	12.40	100	0.11
ML412PJD184MLZ	170 @ 8.0 MHz	39	144	180	15.32	100	0.10
ML412PJD224MLZ	155 @ 7.1 MHz	27	176	220	18.56	100	0.09
ML412PJD334MLZ	222 @ 5.9 MHz	16	264	330	27.70	100	0.07

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

ML412PJD334MLZ

Termination: L = Silver-palladium-platinum-glass frit.

R = Matte tin over nickel over silver.

Screening: Z = Unscreened

Y = Unscreened (SLDC Option A)

W = Unscreened (SLDC Option B)

H = Coilcraft CP-SA-10001 Group A

G = Coilcraft CP-SA-10001 Group A (SLDC Option A)

D = Coilcraft CP-SA-10001 Group A (SLDC Option B)

- Screening performed to the document's latest revision.

- Custom testing also available.

- Country of origin restrictions available; prefix option G.

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.

7. Electrical specifications at 25°C.

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



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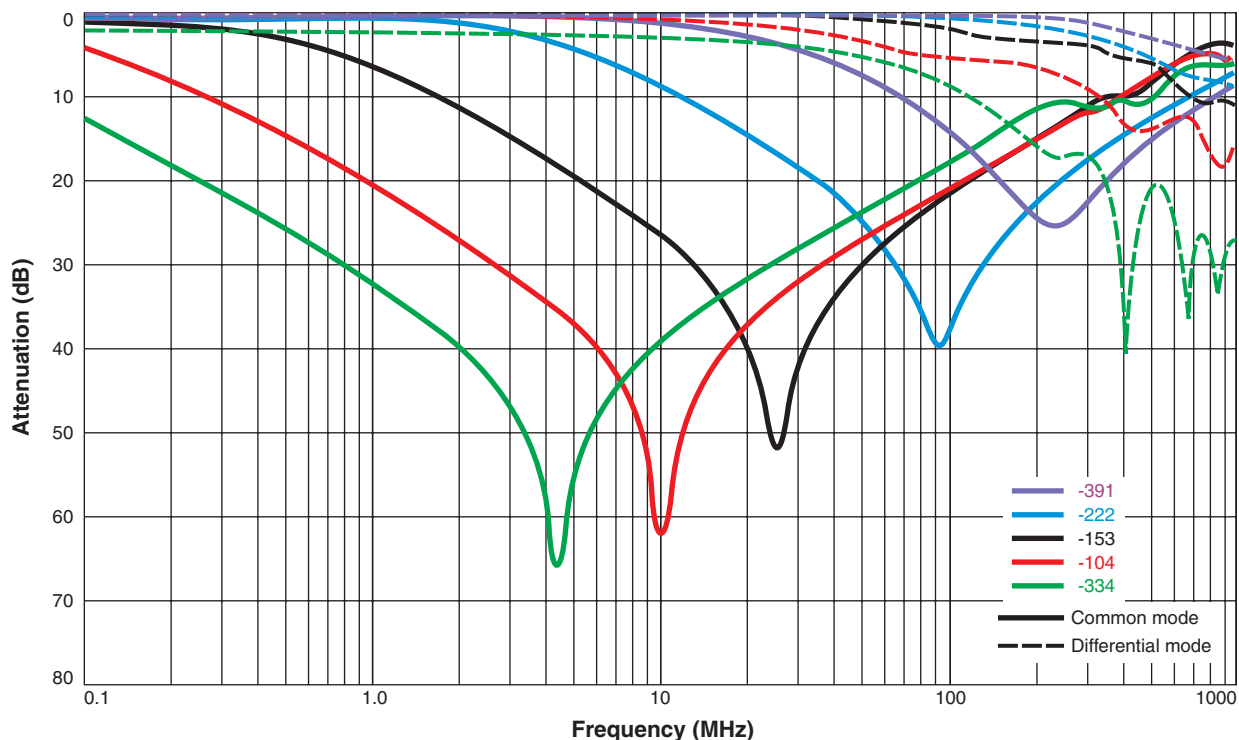
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ML412PJD Series Common Mode Chokes

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency

