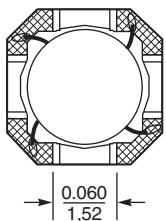
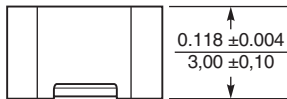
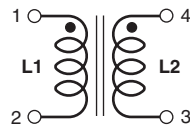
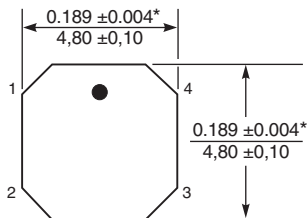
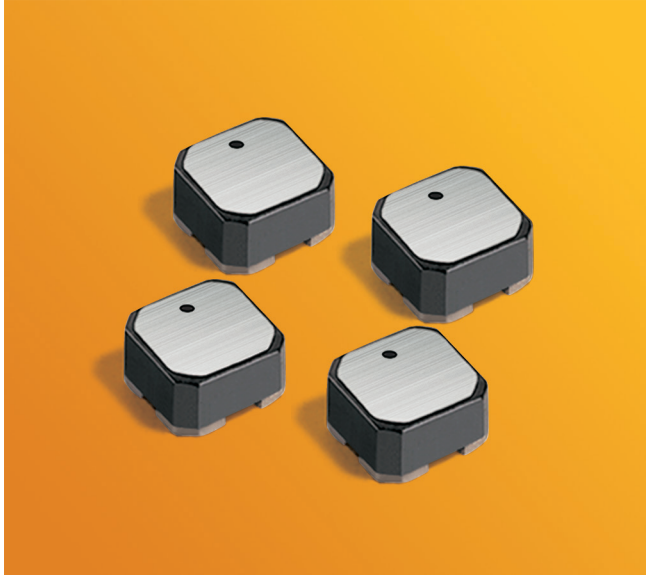
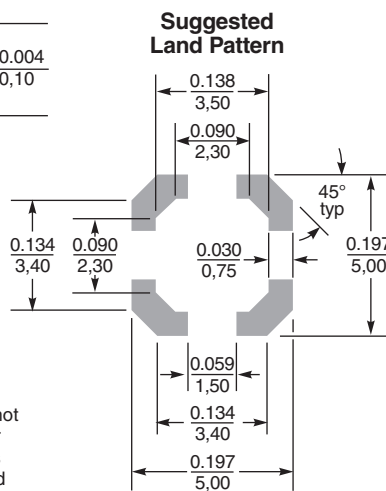


Coupled Inductors for Critical Applications

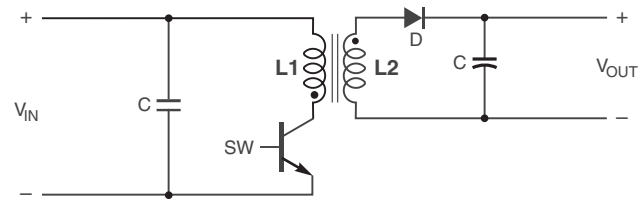


*Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0.13 mm.

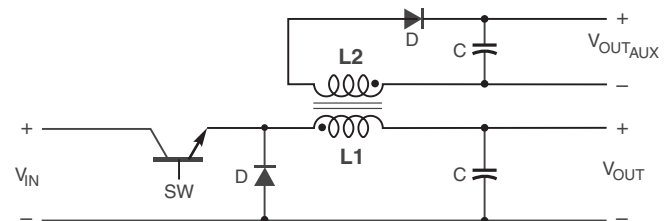


Dimensions are in inches
mm

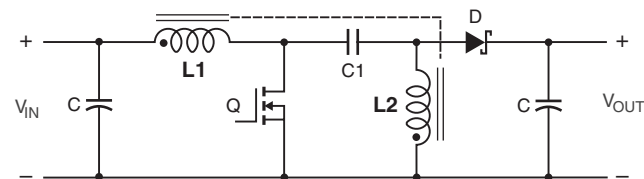
- Only 3 mm high and 5 mm square
- Ideal for use in flyback, multi-output buck and SEPIC applications.
- High inductance, high efficiency and excellent current handling
- Can also be used as two single inductors connected in series or parallel or as a common mode choke.



Typical Flyback Converter



Typical Buck Converter with auxiliary output



Typical SEPIC schematic

Core material Ferrite

Core and winding loss [Go to online calculator](#)

Weight 210 – 300 mg

Terminations Silver-palladium-platinum-glass frit.

Ambient temperature -55°C to +105°C with Irms current,t

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 V

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)

Packaging 750 per 7" reel Plastic tape: 12 mm wide, 0.32 mm thick, 8 mm pocket spacing, 3.1 mm pocket depth

Recommended pick and place nozzle OD: 5 mm; ID: ≤ 2.5 mm

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

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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.

ML466PJD Series Coupled Inductors

Part number ¹	Inductance ² (μ H)	DCR max ³ (Ohms)	SRF typ ⁴ (MHz)	Coupling coefficient typ	Leakage L typ ⁵ (μ H)	Isat (A) ⁶			Irms (A)	
						10% drop	20% drop	30% drop	both windings ⁷	one winding ⁸
ML466PJD102NLZ	1.0 \pm 30%	0.042	153	0.95	0.09	4.30	4.49	4.67	2.20	3.11
ML466PJD152MLZ	1.5 \pm 20%	0.048	118	0.97	0.09	3.90	4.20	4.30	2.05	2.90
ML466PJD222MLZ	2.2 \pm 20%	0.067	87.0	0.98	0.10	2.80	2.98	3.07	1.95	2.76
ML466PJD332MLZ	3.3 \pm 20%	0.077	61.0	0.98	0.10	2.50	2.70	2.80	1.70	2.40
ML466PJD472MLZ	4.7 \pm 20%	0.111	49.0	0.99	0.11	2.10	2.20	2.20	1.40	1.98
ML466PJD562MLZ	5.6 \pm 20%	0.125	44.0	0.99	0.11	1.80	1.80	1.89	1.35	1.91
ML466PJD682MLZ	6.8 \pm 20%	0.159	40.0	0.99	0.12	1.40	1.48	1.48	1.20	1.70
ML466PJD103MLZ	10 \pm 20%	0.210	28.0	0.99	0.13	1.20	1.20	1.20	1.05	1.48
ML466PJD153MLZ	15 \pm 20%	0.298	23.0	0.99	0.15	1.00	1.17	1.17	0.85	1.20
ML466PJD223MLZ	22 \pm 20%	0.452	17.0	>0.99	0.17	0.89	0.98	0.98	0.70	0.99
ML466PJD333MLZ	33 \pm 20%	0.565	16.0	>0.99	0.20	0.73	0.77	0.78	0.60	0.85
ML466PJD473MLZ	47 \pm 20%	0.806	12.0	>0.99	0.24	0.59	0.63	0.65	0.50	0.71
ML466PJD683MLZ	68 \pm 20%	1.13	9.00	>0.99	0.29	0.50	0.54	0.55	0.43	0.61
ML466PJD104MLZ	100 \pm 20%	1.79	8.44	>0.99	0.37	0.47	0.54	0.56	0.33	0.47
ML466PJD154MLZ	150 \pm 20%	2.43	6.72	>0.99	0.46	0.38	0.43	0.45	0.28	0.40
ML466PJD224MLZ	220 \pm 20%	3.30	5.53	>0.99	0.54	0.31	0.35	0.36	0.24	0.34
ML466PJD334MLZ	330 \pm 20%	5.36	4.17	>0.99	0.65	0.25	0.25	0.32	0.18	0.25
ML466PJD474MLZ	470 \pm 20%	7.51	3.52	>0.99	0.76	0.21	0.24	0.26	0.15	0.21
ML466PJD684MLZ	680 \pm 20%	10.8	2.93	>0.99	0.89	0.17	0.20	0.21	0.13	0.18
ML466PJD105MLZ	1000 \pm 20%	16.5	2.33	>0.99	1.20	0.15	0.17	0.17	0.10	0.14

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

ML466PJD105MLZ

Termination: L = Silver-palladium-platinum-glass frit.
R = Matte tin over nickel over silver.

Screening: Z = Unscreened
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.

- Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent. When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value.
- DCR is for each winding. When leads are connected in parallel, DCR is half the value. When leads are connected in series, DCR is twice the value.
- SRF measured using an Agilent/HP 4191A or equivalent. When leads are connected in parallel, SRF is the same value.
- Leakage Inductance is for L1 and is measured with L2 shorted.
- DC current, at which the inductance drops the specified amount from its value without current. It is the sum of the current flowing in both windings.
- Equal current when applied to each winding simultaneously that causes a 40°C temperature rise from 25°C ambient.
[Calculate temperature rise.](#)
- Maximum current when applied to one winding that causes a 40°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
[Calculate temperature rise.](#)
- Electrical specifications at 25°C.

Coupled Inductor Core and Winding Loss Calculator

This web-based utility allows you to enter frequency, peak-to-peak (ripple) current, and Irms current to predict temperature rise and overall losses, including core loss. [Go to online calculator.](#)



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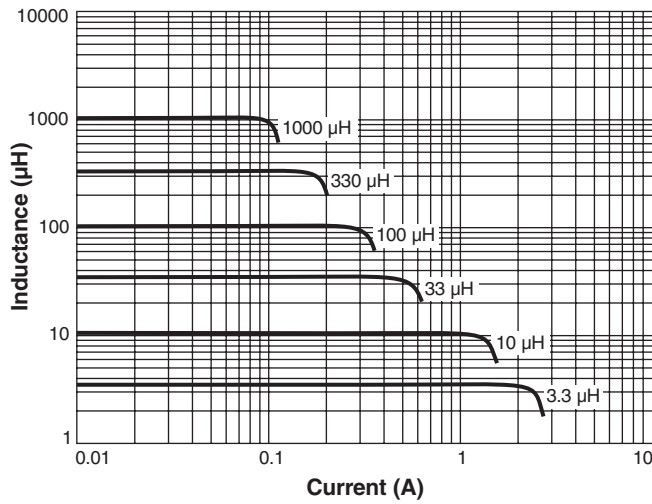
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www.coilcraft-cps.com

Document ML757-2 Revised 08/25/20

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.

ML466PJD Series Coupled Inductors

Typical L vs Current



Typical L vs Frequency

