

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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LOW PROFILE SELF-LEADED **POWER INDUCTORS**



Designed for PCMCIA Applications



- Small PCMCIA size (.38" X .43" X .098")
- Frequency range: 100 kHz to 1 MHz
- Up to 3 amps rated DC current
- Surface mount, pick and placeable

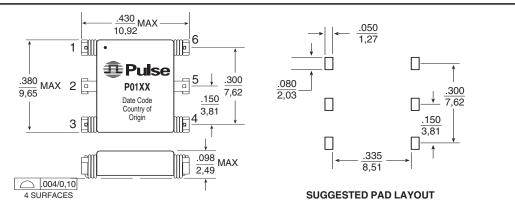
Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C								
ID		Reference Values			Control Values		Calculation Data	
Part Number	Hookup	I _{DC} (amp)	L @ DC L _{DC} (µH)	ET (V-µsec)	L w/o DC L₀ ±20% (µH)	DCR (MAX) (mΩ)	100 Gauss ET ₁₀₀ (V-µsec)	1 Amp DC H ₁ (Orsted)
P0108	Series	0.27	122.6	16.55	137.8	1545	2.77	102.50
P0107	Series	0.33	88.5	14.60	100.5	1068	2.37	87.55
P0106	Series	0.40	60.1	12.03	69.1	720	1.96	72.60
P0116	Series	0.44	43.6	9.59	46.9	692	1.62	59.79
P0108	Parallel	0.54	30.7	8.28	34.4	382	1.38	51.25
P0105	Series	0.62	20.1	6.22	21.6	325	1.10	40.57
P0107	Parallel	0.66	22.1	7.30	25.1	267	1.18	43.77
P0104	Series	0.73	15.7	5.74	17.3	236	0.98	36.30
P0106	Parallel	0.80	15.0	6.01	17.3	180	0.98	36.30
P0103	Series	0.86	12.1	5.21	13.5	170	0.87	32.03
P0116	Parallel	0.88	10.9	4.80	11.7	173	0.81	29.89
P0102	Series	1.03	9.0	4.63	10.1	121	0.75	27.76
P0101	Series	1.23	6.4	3.92	7.2	86	0.63	23.49
P0105	Parallel	1.24	5.0	3.11	5.4	81	0.55	20.29
P0100	Series	1.41	5.2	3.67	6.0	66	0.58	21.35
P0104	Parallel	1.46	3.9	2.87	4.3	59	0.49	18.15
P0103	Parallel	1.72	3.0	2.60	3.4	42	0.43	16.01
P0102	Parallel	2.06	2.2	2.32	2.5	30	0.38	13.88
P0101	Parallel	2.46	1.6	1.96	1.8	22	0.32	11.74
P0100	Parallel	2.82	1.3	1.83	1.5	16	0.29	10.68

- NOTES: 1. The reference inductance at rated DC current is a typical value.
 - 2. Temperature rise is 50°C in typical buck or boost circuits at 500 kHz and with the reference ET applied to the inductor.
 - 3. Total loss in the inductor is 95 mWatts for 50°C temperature rise above ambient.
 - 4. To estimate temperature rise in a given application, determine copper and core losses, divide by 95 and multiply by 50.
 - 5. For the copper loss, calculate I_{DC}² X R_N.
 - 6. For R_N, multiply DCR_{MAX} by 0.85

- 7. For core loss, using frequency (f) and operating flux density (B), calculate 747 x 10^{-21} x 10^{-21}
- For flux density (B), calculate ET (V-µsec) for the application, divide by ET₁₀₀ from the table, and multiply by 100.
- Limit the DC bias (H) to 31 orsteds. Calculate H by multiplying H₁ from the table by IDC of the application.
- 10. Add suffix "T" to part number for tape and reel package (i.e. P0100T).

Mechanical

Schematic



Weight0.25 grams Tape & Reel1250/reel Tube55/tube

Dimensions: Inches

Unless otherwise specified, all tolerances are $\pm .010$ 0.25

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