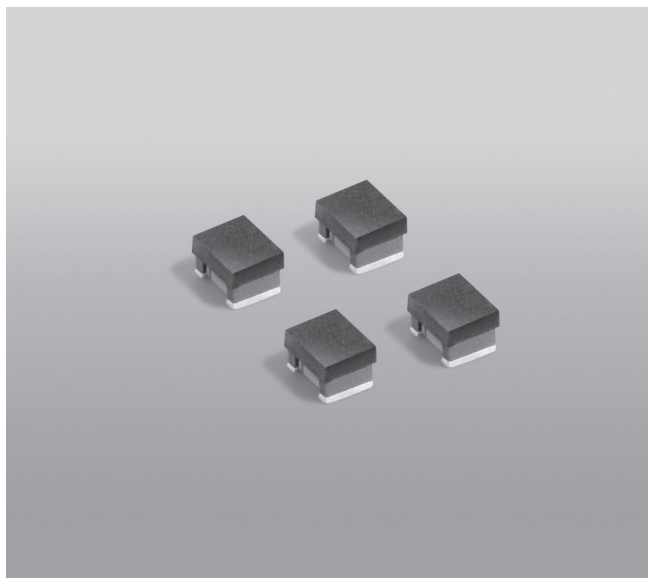


NEW!

Shielded Power Inductors – PFL1008



- Smallest power inductor – only 0.71 mm high, 1.1 x 1.0 mm footprint
- High current handling and high impedance for PoC and other broadband bias applications
- Exceptionally higher SRF compared to thin film alternatives in similar size
- AEC-Q200 qualified

Core material Composite

Core and winding loss See www.coilcraft.com/coreloss

Weight 10 – 15 mg

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over silver-palladium-glass frit.

Ambient temperature –40°C to +125°C

Maximum part temperature +140°C (ambient + temp rise). [Derating](#).

Storage temperature Component: –40°C to +140°C.

Tape and reel packaging: –40°C to +80°C

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)

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

Part number ¹	Inductance ² ±20% (µH)	DCR (Ohms) ³		SRF typ ⁴ (MHz)	Isat (mA) ⁵			Irms (mA)		
		typ	max		10% drop	20% drop	30% drop	at 25°C ⁶	at 85°C ⁷	at 125°C ⁸
PFL1008-181MRW	0.18	0.056	0.067	1100	820	1200	1300	1650	1500	1050
PFL1008-561MRW	0.56	0.25	0.30	600	440	620	680	680	610	450
PFL1008-102MRW	1.0	0.50	0.60	430	300	430	490	460	410	290
PFL1008-222MRW	2.2	0.75	0.90	160	210	320	360	360	320	230
PFL1008-332MRW	3.3	1.30	1.56	130	180	270	310	350	315	210
PFL1008-472MRW	4.7	1.50	1.80	100	140	210	240	250	225	160
PFL1008-682MRW	6.8	1.80	2.16	50	110	170	200	230	210	150
PFL1008-103MRW	10	2.30	2.76	30	80	130	160	230	205	150

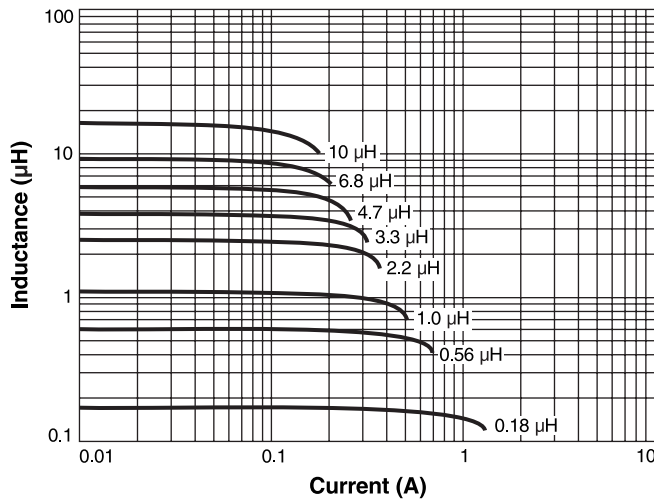
- Packaging:** W = 7" machine-ready reel. EIA-481 punched paper tape (2000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
- Inductance tested at 7.9 MHz, 0.1 Vrms using a Coilcraft SMD-F test fixture and Coilcraft-provided correlation pieces with an Agilent 4263 (or equivalent) with correlation.
- DCR is measured on a Keithley 580 Micro-ohmmeter (or equivalent) with a Coilcraft CCF858 test fixture.
- SRF is measured on an Agilent 8753ES (or equivalent) with a Coilcraft SMD-D test fixture.
- DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information.](#)

- Current that causes a 40°C rise at 25°C.
 - Maximum current that can be applied at 85°C.
 - Maximum current that can be applied at 125°C.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

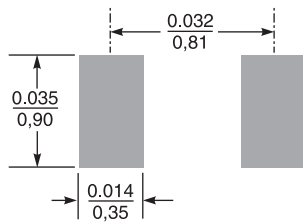
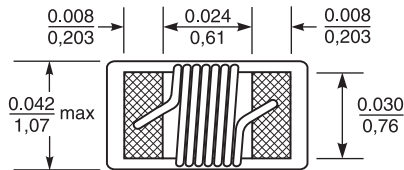
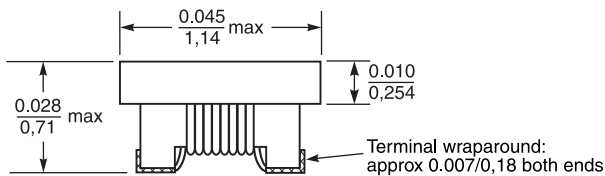
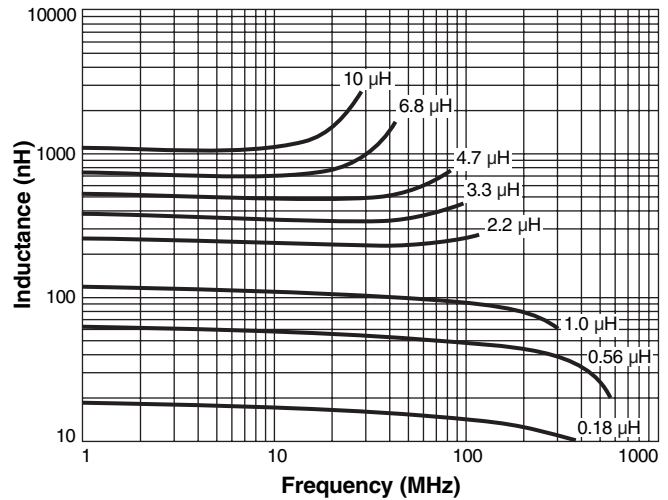


PFL1008 Series

Typical L vs Current



Typical L vs Frequency



**Recommended
Land Pattern**

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

Packaging 2000 per 7" reel Paper tape: 8 mm wide, 1.0 mm thick,
2 mm pocket spacing