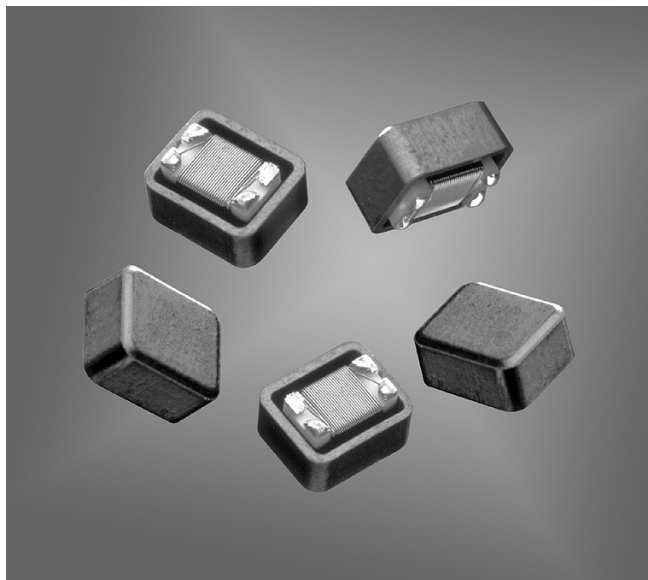




1812DPS Coupled Inductors



- Coupled inductor optimized for xDSL filtering applications
- Can be used as a common mode choke, 1:1 transformer or in SEPIC applications

Core material Ferrite

Terminations RoHS compliant gold over nickel over moly-manganese.

Weight 0.30 – 0.36 g

Ambient temperature –40°C to +85°C with Irms current

Maximum part temperature +125°C (ambient + temp rise)

Storage temperature Component: –40°C to +125°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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 600/7" reel; 2200/13" reel Plastic tape: 12 mm wide, 0.25 mm thick, 8 mm pocket spacing, 3.9 mm pocket depth

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

Part number ¹	L ±20% ² (µH)	Q min ³	DCR max (Ohms)	SRF min (MHz)	Isat ⁴ (mA)	Irms ⁵ (mA)
1812DPS-102ML_	1.0	38	0.20	285	2400	2100
1812DPS-222ML_	2.2	29	0.33	175	1500	1200
1812DPS-472ML_	4.7	43	0.41	102	1500	1000
1812DPS-103ML_	10	35	0.74	74	800	780
1812DPS-153ML_	15	37	0.96	65	700	710
1812DPS-223ML_	22	38	1.84	54	500	530
1812DPS-393ML_	39	39	2.60	5.7	450	420
1812DPS-473ML_	47	40	2.66	4.8	400	390

1. When ordering, please specify **packaging** code:

1812DPS-473MLC

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (600 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 (2200 parts per full reel).

2. Per winding. Tested at 100 kHz, 0.1 Vrms, 0 Adc.

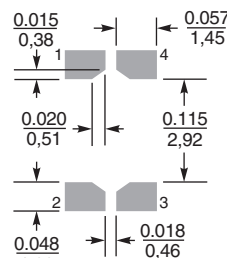
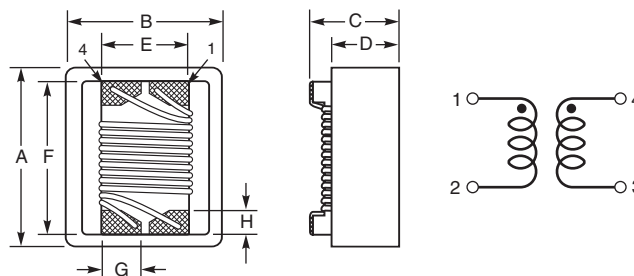
3. Q measured at 1 MHz.

4. DC current at which the inductance drops 10% (typ) from its value without current.

5. 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.

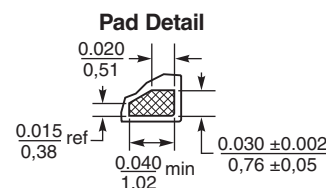
6. Electrical specifications at 25°C.

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



Recommended Land Pattern

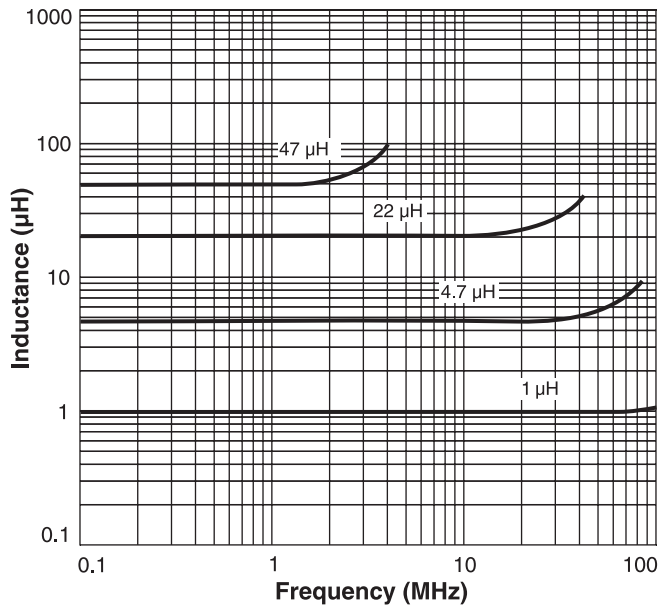
A max	B max	C max	D ref	E ref	F ref	G min	H
0.231	0.196	0.150	0.107	0.100	0.178	0.04	0.03 inches
5,87	4,98	3,81	2,72	2,54	4,52	1,02	0,76 mm



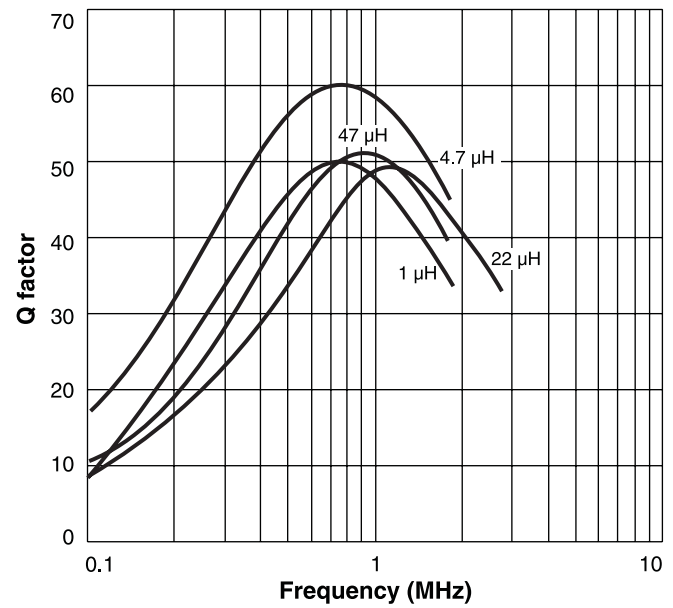


1812DPS Coupled Inductors

Typical L vs Frequency



Typical Q vs Frequency



www.coilcraft.com

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 248-2 Revised 10/12/15

© Coilcraft Inc. 2015

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Coilcraft:

[1812DPS-223MLC](#) [1812DPS-103MLC](#) [1812DPS-153MLC](#) [1812DPS-472MLB](#) [1812DPS-102MLB](#) [1812DPS-393MLB](#) [1812DPS-222MLC](#) [1812DPS-223MLB](#) [1812DPS-153MLB](#) [1812DPS-222MLB](#) [1812DPS-393MLC](#) [1812DPS-473MLB](#) [1812DPS-103MLB](#) [1812DPS-102MLC](#) [1812DPS-472MLC](#) [1812DPS-473MLC](#)