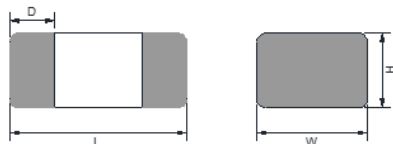


Product outline

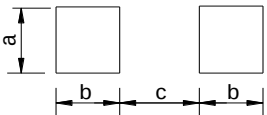
- Ferrite material multilayer chip inductors,minature size,suitable for SMT process.
- No cross coupling due to magnetic shielded structures.
- Higher DC bias characteristics and Low DC resistance due to trench technology.



Dimensions(mm)



Recommended Patterns



Type	L	W	H	D	a	b	c	Packaging (pcs/reel)
160809	1.6±0.2	0.8±0.2	1.1 max	0.30±0.2	0.6~0.8	0.6~0.8	0.6~0.8	4000
201210	2.0±0.2	1.2±0.2	1.0 max	0.5±0.3	0.9~1.6	0.8~1.2	0.8~1.2	4000
201212	2.0±0.2	1.2±0.2	1.2±0.2	0.5±0.3	0.9~1.6	0.8~1.2	0.8~1.2	3000
201610	2.0±0.2	1.6±0.2	1.0 max	0.5±0.3	1.2~2.0	0.8~1.2	0.8~1.2	3000
201612	2.0±0.2	1.6±0.2	1.2 max	0.5±0.3	1.2~2.0	0.8~1.2	0.8~1.2	3000
252010	2.5±0.2	2.0±0.2	1.0 max	0.5±0.3	1.8~2.2	0.6~1.0	1.0~1.4	3000
252012	2.5±0.2	2.0±0.2	1.2 max	0.5±0.3	1.8~2.2	0.6~1.0	1.0~1.4	3000

Product Identification

HPL 201209 G 2R2 M I S
① ② ③ ④ ⑤ ⑥ ⑦

- ① Higher DC bias Current Multilayer Inductor Series: HPL
- ② Dimensions: 0603(inch)=1608(mm)=1.6x0.8mm
- ③ G:Internal Code.
- ④ Inductance Value: R47=0.47uH,4R7=4.7uH,100=10uH
- ⑤ Tolerance: K=±10%, M=±20%, N=±30%
- ⑥ Packaging:T=TAPING&REEL
- ⑦ Characteristic level

HPL160809G Electrical Characteristics

Part Number	Inductance (μ H) ①	DCR max. (Ω) ②	Isat-max. (A) ③	Isat-Typ. (A) ③	Irms-max (A) ④	SRF-min. MHz
HPL160809G-R47MTS	0.47	0.19	1.00	1.20	1.10	180
HPL160809G-R68MTS	0.68	0.23	0.95	1.10	1.15	160
HPL160809G-1R0MTS	1	0.25	0.65	0.80	1.00	125
HPL160809G-2R2MTS	2.2	0.38	0.25	0.30	0.85	80
HPL160809G-3R3MTS	3.3	0.50	0.13	0.15	0.70	80
HPL160809G-4R7MTS	4.7	0.50	0.07	0.08	0.70	65
HPL160809G-6R8MTS	6.8	0.70	0.13	0.15	0.50	45
HPL160809G-100MTS	10	0.47	0.06	0.08	0.50	35

HPL201210G Electrical Characteristics

Part Number	Inductance (μ H) ①	DCR max. (Ω) ②	Isat-max. (A) ③	Isat-Typ. (A) ③	Irms-max (A) ④	SRF-min. MHz
HPL201210G-R47MTS	0.47	0.10	1.00	1.20	1.50	100
HPL201210G-1R0MTS	1	0.14	0.95	1.15	1.30	60
HPL201210G-2R2MTS	2.2	0.25	0.42	0.50	0.90	40
HPL201210G-3R3MTS	3.3	0.25	0.28	0.35	0.90	30
HPL201210G-4R7MTS	4.7	0.31	0.23	0.28	0.80	30
HPL201210G-4R7MTH	4.7	0.22	0.23	0.28	1.20	30

HPL201212G Electrical Characteristics

Part Number	Inductance (μ H) ①	DCR max. (Ω) ②	Isat-max. (A) ③	Isat-Typ. (A) ③	Irms-max (A) ④	SRF-min. MHz
HPL201212G-2R2MTS	2.2	0.44	0.60	0.80	0.80	35
HPL201212G-3R3MTS	3.3	0.50	0.57	0.63	0.75	25
HPL201212G-4R7MTS	4.7	0.50	0.54	0.63	0.75	20
HPL201212G-6R8MTS	6.8	0.38	0.21	0.25	1.00	45
HPL201212G-100MTS	10	0.38	0.11	0.13	1.00	35
HPL201212G-100MTH	10	0.70	0.20	0.23	0.20	20

① Inductance tested at 1MHz/ 0.05 Vrms using an Agilent/HP 4192A or equivalent.

② DCR measured on a micro-ohmmeter.

③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.

④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.

HPL201610G Electrical Characteristics

Part Number	Inductance (μ H) ①	DCR max. (Ω) ②	Isat-max. (A) ③	Isat-Typ. (A) ③	Irms-max (A) ④	SRF-min. MHz
HPL201610G-R47MTS	0.47	0.1	1.35	1.6	1.5	100
HPL201610G-1R0MTS	1	0.11	1.0	1.2	1.4	70
HPL201610G-2R2MTS	2.2	0.14	0.42	0.5	1.2	50
HPL201610G-3R3MTS	3.3	0.15	0.27	0.33	1.2	40
HPL201610G-4R7MTS	4.7	0.18	0.18	0.22	1.1	30

HPL201612G Electrical Characteristics

Part Number	Inductance (μ H) ①	DCR max. (Ω) ②	Isat-max. (A) ③	Isat-Typ. (A) ③	Irms-max (A) ④	SRF-min. MHz
HPL201612G-6R8MTS	6.8	0.21	0.18	0.22	1.2	40
HPL201612G-100MTS	10	0.31	0.17	0.20	1.1	35

HPL252010G Electrical Characteristics

Part Number	Inductance (μ H) ①	DCR max. (Ω) ②	Isat-max. (A) ③	Isat-Typ. (A) ③	Irms-max (A) ④	SRF-min. MHz
HPL252010G-R47MTS	0.47	0.05	1.3	1.5	1.8	105
HPL252010G-1R0MTS	1	0.08	1.15	1.4	1.6	70
HPL252010G-2R2MTS	2.2	0.1	0.7	0.85	1.3	55
HPL252010G-3R3MTS	3.3	0.13	0.38	0.45	1.2	30
HPL252010G-4R7MTS	4.7	0.14	0.27	0.32	1.1	25
HPL252010G-6R8MTS	6.8	0.56	0.3	0.35	0.75	30
HPL252010G-100MTS	10	0.63	0.21	0.25	0.7	25

HPL252012G Electrical Characteristics

Part Number	Inductance (μ H) ①	DCR max. (Ω) ②	Isat-max. (A) ③	Isat-Typ. (A) ③	Irms-max (A) ④	SRF-min. MHz
HPL252012G-1R0MTS	1	0.11	1.75	2.1	2.1	85
HPL252012G-2R2MTS	2.2	0.31	1.35	1.6	1.1	50
HPL252012G-3R3MTS	3.3	0.31	1.05	1.25	1.1	50
HPL252012G-4R7MTS	4.7	0.5	0.68	0.8	0.9	40
HPL252012G-6R8MTS	6.8	0.63	0.63	0.75	0.8	30
HPL252012G-100MTS	10	0.63	0.42	0.5	0.8	25

① Inductance tested at 1MHz, 0.05 Vrms using an Agilent/HP 4192A or equivalent.

② DCR measured on a micro-ohmmeter.

③ Isat: The DC current at which the inductance decreases by 30% of it's initial value.

④ Irms: The DC current at which $\Delta t=40^{\circ}\text{C}$.