

Features:

- Wirewound of ferrite core miniature chip inductor
- LPM1310, 1310-HP and 1813 are high Q value at high frequency and low DC resistance
- LPM1310(C)-HP and 1813(C) are low DC resistance, high current capacity and high impedance characteristics.
They are excellent for using as a choke coil in DC power supply circuits
- 100% RoHS compliant and lead free without exemption
- Halogen free
- REACH compliant



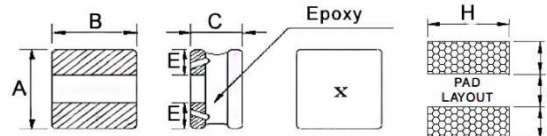
Applications:

- High frequency communication products
- Personal computers
- Disk drives and computer peripherals
- DC power supply circuits

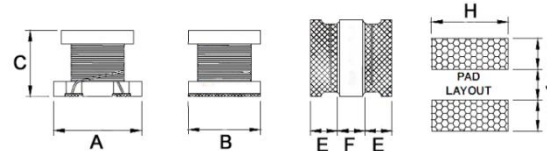
Inductance and Current Ranges		
Type / Code	Inductance (μH)	Current Range (A)
LPM1008	1 ~ 22	2.2 ~ 0.5
LPM1008...-HP	1 ~ 22	2.8 ~ 0.55
LPM1010	1 ~ 22	2.3 ~ 0.51
LPM1310	1 ~ 100	1 ~ 0.1
LPM1310...-HP	1 ~ 560	0.445 ~ 0.04
LPM1310(C)	0.47 ~ 120	3.4 ~ 0.17
LPM1310(C)...-HP	1 ~ 560	1 ~ 0.06
LPM1813	1 ~ 2200	0.5 ~ 0.03
LPM1813(C)	1 ~ 470	1.08 ~ 0.09
LPM2220(C)	0.12 ~ 10000	6 ~ 0.05

Electrical specifications at 25 °C

Mechanical Specifications



Type / Code	A	B	C	E	H	I	J	Unit
LPM1008	0.098 ± 0.008 2.50 ± 0.20	0.079 ± 0.008 2.00 ± 0.20	0.040 max 1.02 max	0.031 ref 0.80 ref	0.079 2.00	0.033 0.85	0.031 0.80	inches mm
LPM1008...-HP	0.098 ± 0.008 2.50 ± 0.20	0.079 ± 0.008 2.00 ± 0.20	0.047 max 1.20 max	0.031 ref 0.80 ref	0.079 2.00	0.033 0.85	0.031 0.80	inches mm



Type / Code	A	B	C	E	F	H	I	J	Unit
LPM1010	0.098 ± 0.008 2.50 ± 0.20	0.098 ± 0.008 2.50 ± 0.20	0.041 max 1.05 max	0.035 ref 0.90 ref	0.028 ref 0.70 ref	0.098 2.50	0.047 1.20	0.031 0.80	inches mm
LPM1310(C)	0.126 ± 0.012 3.20 ± 0.30	0.098 ± 0.008 2.50 ± 0.20	0.061 ± 0.012 1.55 ± 0.30	0.041 ± 0.012 1.05 ± 0.30	0.041 ± 0.012 1.05 ± 0.30	0.079 2.00	0.059 1.50	0.039 1.00	inches mm
LPM1310(C)...-HP	0.126 ± 0.012 3.20 ± 0.30	0.098 ± 0.008 2.50 ± 0.20	0.079 ± 0.012 2.00 ± 0.30	0.028 min 0.70 min	0.028 min 0.70 min	0.079 2.00	0.059 1.50	0.039 1.00	inches mm
LPM1813(C)	0.177 ± 0.012 4.50 ± 0.30	0.126 ± 0.008 3.20 ± 0.20	0.102 ± 0.016 2.60 ± 0.40	0.039 min 1.00 min	0.039 min 1.00 min	0.118 3.00	0.079 2.00	0.047 1.20	inches mm
LPM2220(C)	0.224 ± 0.012 5.70 ± 0.30	0.197 ± 0.012 5.00 ± 0.30	0.185 ± 0.012 4.70 ± 0.30	0.051 min 1.30 min	0.067 min 1.70 min	0.197 5.00	0.079 2.00	0.079 2.00	inches mm

Electrical Specifications – LPM1008

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	I rms (A) typical	I sat (A) typical	Marking Code
LPM1008MT1R0	1.0	20%	1 MHz, 0.1 V	0.121	2.2	2.2	A
LPM1008MT1R5	1.5	20%	1 MHz, 0.1 V	0.193	1.8	1.9	B
LPM1008MT2R2	2.2	20%	1 MHz, 0.1 V	0.232	1.68	1.6	C
LPM1008MT3R3	3.3	20%	1 MHz, 0.1 V	0.372	1.34	1.2	D
LPM1008MT4R7	4.7	20%	1 MHz, 0.1 V	0.548	1	1	E
LPM1008MT5R6	5.6	20%	1 MHz, 0.1 V	0.626	0.9	0.9	F
LPM1008MT6R8	6.8	20%	1 MHz, 0.1 V	0.778	0.9	0.9	G
LPM1008MT100	10	20%	1 MHz, 0.1 V	1.036	0.8	0.7	H
LPM1008MT220	22	20%	1 MHz, 0.1 V	2.391	0.5	0.5	I

Electrical Specifications – LPM1008-HP

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	I rms (A) typical	I sat (A) typical	Marking Code
LPM1008MT1R0-HP	1.0	20%	1 MHz, 0.1 V	0.137	2.2	2.8	A
LPM1008MT1R5-HP	1.5	20%	1 MHz, 0.1 V	0.19	1.86	2.2	B
LPM1008MT2R2-HP	2.2	20%	1 MHz, 0.1 V	0.285	1.7	1.8	C
LPM1008MT3R3-HP	3.3	20%	1 MHz, 0.1 V	0.454	1.2	1.3	D
LPM1008MT4R7-HP	4.7	20%	1 MHz, 0.1 V	0.659	1.04	1.1	E
LPM1008MT5R6-HP	5.6	20%	1 MHz, 0.1 V	0.685	1	1.1	F
LPM1008MT6R8-HP	6.8	20%	1 MHz, 0.1 V	0.988	0.94	0.94	G
LPM1008MT100-HP	10	20%	1 MHz, 0.1 V	1.19	0.84	0.82	H
LPM1008MT220-HP	22	20%	1 MHz, 0.1 V	2.743	0.54	0.55	I

Electrical Specifications – LPM1010

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) typical	I rms (A) typical	I sat (A) typical
LPM1010MT1R0	1.0	20%	1 MHz, 0.1 V	0.085	1.9	2.30
LPM1010MT1R5	1.5	20%	1 MHz, 0.1 V	0.115	1.5	1.90
LPM1010MT2R2	2.2	20%	1 MHz, 0.1 V	0.168	1	1.50
LPM1010MT3R3	3.3	20%	1 MHz, 0.1 V	0.239	1.1	1.30
LPM1010MT4R7	4.7	20%	1 MHz, 0.1 V	0.316	0.9	1.10
LPM1010MT5R6	5.6	20%	1 MHz, 0.1 V	0.42	0.83	0.98
LPM1010MT6R8	6.8	20%	1 MHz, 0.1 V	0.487	0.80	0.90
LPM1010MT8R2	8.2	20%	1 MHz, 0.1 V	0.548	0.71	0.84
LPM1010MT100	10	20%	1 MHz, 0.1 V	0.61	0.68	0.79
LPM1010MT220	22	20%	1 MHz, 0.1 V	1.552	0.40	0.51

Electrical Specifications – LPM1310

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	IDC (A) max	SRF (MHz) min
LPM1310NT1R0	1.0	30%	1 MHz, 0.1 V	0.078	1	100
LPM1310NT1R5	1.5	30%	1 MHz, 0.1 V	0.068	1.2	100
LPM1310MT2R2	2.2	20%	1 MHz, 0.1 V	0.126	0.79	64
LPM1310MT3R3	3.3	20%	1 MHz, 0.1 V	0.180	0.7	50
LPM1310MT4R7	4.7	20%	1 MHz, 0.1 V	0.195	0.65	43
LPM1310KT100	10	10%	1 MHz, 0.1 V	0.420	0.45	26
LPM1310KT150	15	10%	1 MHz, 0.1 V	0.750	0.3	22
LPM1310KT220	22	10%	1 MHz, 0.1 V	1.000	0.25	19
LPM1310KT330	33	10%	1 MHz, 0.1 V	1.400	0.2	17
LPM1310KT470	47	10%	1 MHz, 0.1 V	2.200	0.17	13
LPM1310KT680	68	10%	1 MHz, 0.1 V	3.200	0.13	9
LPM1310KT101	100	10%	1 MHz, 0.1 V	4.500	0.1	8

Electrical Specifications – LPM1310-HP

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
LPM1310MT1R0-HP	1.0	20%	1 MHz, 0.1 V	0.5	0.445
LPM1310MT1R2-HP	1.2	20%	1 MHz, 0.1 V	0.6	0.425
LPM1310_T1R5-HP	1.5	10%, 20%	1 MHz, 0.1 V	0.6	0.4
LPM1310_T1R8-HP	1.8	10%, 20%	1 MHz, 0.1 V	0.7	0.39
LPM1310_T2R2-HP	2.2	10%, 20%	1 MHz, 0.1 V	0.8	0.37
LPM1310_T2R7-HP	2.7	10%, 20%	1 MHz, 0.1 V	0.9	0.32
LPM1310_T3R3-HP	3.3	10%, 20%	1 MHz, 0.1 V	1	0.3
LPM1310_T3R9-HP	3.9	10%, 20%	1 MHz, 0.1 V	1.1	0.29
LPM1310_T4R7-HP	4.7	10%, 20%	1 MHz, 0.1 V	1.2	0.27
LPM1310_T5R6-HP	5.6	10%, 20%	1 MHz, 0.1 V	1.3	0.25
LPM1310_T6R8-HP	6.8	10%, 20%	1 MHz, 0.1 V	1.5	0.24
LPM1310_T8R2-HP	8.2	10%, 20%	1 MHz, 0.1 V	1.6	0.225
LPM1310_T100-HP	10	5%, 10%	1 MHz, 0.1 V	1.8	0.19
LPM1310_T120-HP	12	5%, 10%	1 MHz, 0.1 V	2	0.18
LPM1310_T150-HP	15	5%, 10%	1 MHz, 0.1 V	2.2	0.17
LPM1310_T180-HP	18	5%, 10%	1 MHz, 0.1 V	2.5	0.165
LPM1310_T220-HP	22	5%, 10%	1 MHz, 0.1 V	2.8	0.15
LPM1310_T270-HP	27	5%, 10%	1 MHz, 0.1 V	3.1	0.125
LPM1310_T330-HP	33	5%, 10%	1 MHz, 0.1 V	3.5	0.115
LPM1310_T390-HP	39	5%, 10%	1 MHz, 0.1 V	3.9	0.11
LPM1310_T470-HP	47	5%, 10%	1 MHz, 0.1 V	4.3	0.1
LPM1310_T560-HP	56	5%, 10%	1 MHz, 0.1 V	4.9	0.085
LPM1310_T680-HP	68	5%, 10%	1 MHz, 0.1 V	5.5	0.08
LPM1310_T820-HP	82	5%, 10%	1 MHz, 0.1 V	6.2	0.07
LPM1310_T101-HP	100	5%, 10%	1 MHz, 0.1 V	7	0.08
LPM1310_T121-HP	120	5%, 10%	1 MHz, 0.1 V	8	0.075
LPM1310_T151-HP	150	5%, 10%	1 MHz, 0.1 V	9.3	0.07
LPM1310_T181-HP	180	5%, 10%	1 MHz, 0.1 V	10.2	0.065
LPM1310_T221-HP	220	5%, 10%	1 MHz, 0.1 V	11.8	0.065
LPM1310_T271-HP	270	5%, 10%	1 MHz, 0.1 V	12.5	0.065
LPM1310_T331-HP	330	5%, 10%	1 MHz, 0.1 V	15	0.065
LPM1310_T391-HP	390	5%, 10%	1 MHz, 0.1 V	22	0.05
LPM1310_T471-HP	470	5%, 10%	1 KHz, 0.1 V	25	0.045
LPM1310_T561-HP	560	5%, 10%	1 KHz, 0.1 V	28	0.04

Electrical Specifications – LPM1310(C)

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) ±20%	I _{sat} (A) max	I _{rms} (A) max	SRF (MHz) min
LPM1310NTCR47	0.47	30%	1 MHz, 0.1 V	0.03	3.4	2.55	100
LPM1310NTC1R0	1.0	30%	1 MHz, 0.1 V	0.045	2.3	2.05	100
LPM1310NTC1R5	1.5	30%	1 MHz, 0.1 V	0.057	1.75	1.75	70
LPM1310NTC2R2	2.2	30%	1 MHz, 0.1 V	0.076	1.55	1.6	70
LPM1310NTC3R3	3.3	30%	1 MHz, 0.1 V	0.12	1.25	1.2	50
LPM1310NTC4R7	4.7	30%	1 MHz, 0.1 V	0.18	1	1	40
LPM1310NTC6R8	6.8	30%	1 MHz, 0.1 V	0.24	0.85	0.85	40
LPM1310MTC100	10	20%	1 MHz, 0.1 V	0.38	0.75	0.7	30
LPM1310MTC150	15	20%	1 MHz, 0.1 V	0.57	0.6	0.52	20
LPM1310MTC220	22	20%	1 MHz, 0.1 V	0.81	0.5	0.45	20
LPM1310MTC330	33	20%	1 MHz, 0.1 V	1.15	0.38	0.39	13
LPM1310MTC470	47	20%	1 MHz, 0.1 V	1.78	0.33	0.31	11
LPM1310MTC680	68	20%	1 MHz, 0.1 V	2.28	0.28	0.275	11
LPM1310MTC101	100	20%	1 MHz, 0.1 V	2.7	0.18	0.25	8
LPM1310MTC121	120	20%	1 MHz, 0.1 V	4.38	0.17	0.2	8

Electrical Specifications – LPM1310(C)-HP

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	IDC (A) max
LPM1310MTC1R0-HP	1.0	20%	1 MHz, 0.1 V	0.078	1
LPM1310MTC2R2-HP	2.2	20%	1 MHz, 0.1 V	0.126	0.79
LPM1310MTC3R3-HP	3.3	20%	1 MHz, 0.1 V	0.165	0.5
LPM1310MTC4R7-HP	4.7	20%	1 MHz, 0.1 V	0.195	0.45
LPM1310MTC6R8-HP	6.8	20%	1 MHz, 0.1 V	0.33	0.45
LPM1310MTC100-HP	10	20%	1 MHz, 0.1 V	0.572	0.3
LPM1310 _TC220-HP	22	10%, 20%	1 MHz, 0.1 V	0.923	0.25
LPM1310 _TC470-HP	47	10%, 20%	1 MHz, 0.1 V	1.69	0.17
LPM1310 _TC101-HP	100	5%, 10%	1 MHz, 0.1 V	4.55	0.1
LPM1310 _TC151-HP	150	5%, 10%	1 MHz, 0.1 V	9.1	0.08
LPM1310 _TC221-HP	220	5%, 10%	1 MHz, 0.1 V	10.92	0.07
LPM1310 _TC331-HP	330	5%, 10%	1 MHz, 0.1 V	13	0.06
LPM1310 _TC391-HP	390	5%, 10%	1 MHz, 0.1 V	22.1	0.06
LPM1310 _TC471-HP	470	5%, 10%	1 MHz, 0.1 V	24.7	0.06
LPM1310 _TC561-HP	560	5%, 10%	1 MHz, 0.1 V	28.6	0.06

Electrical Specifications – LPM1813

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	IDC (A) max
LPM1813MT1R0	1.0	20%	1 MHz, 0.1 V	0.2	0.5
LPM1813MT1R2	1.2	20%	1 MHz, 0.1 V	0.2	0.5
LPM1813MT1R5	1.5	20%	1 MHz, 0.1 V	0.3	0.5
LPM1813MT1R8	1.8	20%	1 MHz, 0.1 V	0.3	0.5
LPM1813MT2R2	2.2	20%	1 MHz, 0.1 V	0.3	0.5
LPM1813MT2R7	2.7	20%	1 MHz, 0.1 V	0.32	0.5
LPM1813MT3R3	3.3	20%	1 MHz, 0.1 V	0.35	0.5
LPM1813MT3R9	3.9	20%	1 MHz, 0.1 V	0.38	0.5
LPM1813 _T4R7	4.7	10%, 20%	1 MHz, 0.1 V	0.4	0.5
LPM1813 _T5R6	5.6	10%, 20%	1 MHz, 0.1 V	0.47	0.5
LPM1813 _T6R8	6.8	10%, 20%	1 MHz, 0.1 V	0.5	0.45
LPM1813 _T8R2	8.2	10%, 20%	1 MHz, 0.1 V	0.56	0.45
LPM1813 _T100	10	5%, 10%	1 MHz, 0.1 V	0.56	0.4
LPM1813 _T120	12	5%, 10%	1 MHz, 0.1 V	0.62	0.38
LPM1813 _T150	15	5%, 10%	1 MHz, 0.1 V	0.73	0.36
LPM1813 _T180	18	5%, 10%	1 MHz, 0.1 V	0.82	0.34
LPM1813 _T220	22	5%, 10%	1 MHz, 0.1 V	0.94	0.32
LPM1813 _T270	27	5%, 10%	1 MHz, 0.1 V	1.1	0.3
LPM1813 _T330	33	5%, 10%	1 MHz, 0.1 V	1.2	0.27
LPM1813 _T390	39	5%, 10%	1 MHz, 0.1 V	1.4	0.24
LPM1813 _T470	47	5%, 10%	1 MHz, 0.1 V	1.5	0.22
LPM1813 _T560	56	5%, 10%	1 MHz, 0.1 V	1.7	0.2
LPM1813 _T680	68	5%, 10%	1 MHz, 0.1 V	1.9	0.18
LPM1813 _T820	82	5%, 10%	1 MHz, 0.1 V	2.2	0.17
LPM1813 _T101	100	5%, 10%	1 MHz, 0.1 V	2.5	0.16
LPM1813 _T121	120	5%, 10%	1 MHz, 0.1 V	3	0.15
LPM1813 _T151	150	5%, 10%	1 MHz, 0.1 V	3.7	0.13
LPM1813 _T181	180	5%, 10%	1 MHz, 0.1 V	4.5	0.12
LPM1813 _T221	220	5%, 10%	1 MHz, 0.1 V	5.4	0.11
LPM1813 _T271	270	5%, 10%	1 MHz, 0.1 V	6.8	0.1
LPM1813 _T331	330	5%, 10%	1 MHz, 0.1 V	8.2	0.095
LPM1813 _T391	390	5%, 10%	1 MHz, 0.1 V	9.7	0.09
LPM1813 _T471	470	5%, 10%	1 KHz, 0.1 V	11.8	0.08
LPM1813 _T561	560	5%, 10%	1 KHz, 0.1 V	14.5	0.07

Electrical Specifications – LPM1813 (cont.)

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	IDC (A) max
LPM1813_T681	680	5%, 10%	1 KHz, 0.1 V	17	0.065
LPM1813_T821	820	5%, 10%	1 KHz, 0.1 V	20.5	0.06
LPM1813_T102	1000	5%, 10%	1 KHz, 0.1 V	25	0.05
LPM1813_T122	1200	5%, 10%	1 KHz, 0.1 V	30	0.045
LPM1813_T152	1500	5%, 10%	1 KHz, 0.1 V	37	0.04
LPM1813_T182	1800	5%, 10%	1 KHz, 0.1 V	45	0.035
LPM1813_T222	2200	5%, 10%	1 KHz, 0.1 V	50	0.03

Electrical Specifications – LPM1813(C)

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	IDC (A) max
LPM1813MTC1R0	1.0	20%	1 MHz, 0.1 V	0.08	1.08
LPM1813MTC1R5	1.5	20%	1 MHz, 0.1 V	0.09	1
LPM1813MTC2R2	2.2	20%	1 MHz, 0.1 V	0.11	0.9
LPM1813MTC3R3	3.3	20%	1 MHz, 0.1 V	0.13	0.8
LPM1813_TC4R7	4.7	10%, 20%	1 MHz, 0.1 V	0.15	0.75
LPM1813_TC6R8	6.8	10%, 20%	1 MHz, 0.1 V	0.2	0.72
LPM1813_TC100	10	5%, 10%	1 MHz, 0.1 V	0.24	0.65
LPM1813_TC150	15	5%, 10%	1 MHz, 0.1 V	0.32	0.57
LPM1813_TC220	22	5%, 10%	1 MHz, 0.1 V	0.6	0.42
LPM1813_TC330	33	5%, 10%	1 MHz, 0.1 V	1	0.31
LPM1813_TC470	47	5%, 10%	1 MHz, 0.1 V	1.1	0.28
LPM1813_TC680	68	5%, 10%	1 MHz, 0.1 V	1.7	0.22
LPM1813_TC101	100	5%, 10%	1 MHz, 0.1 V	2.2	0.19
LPM1813_TC151	150	5%, 10%	1 MHz, 0.1 V	3.5	0.13
LPM1813_TC221	220	5%, 10%	1 MHz, 0.1 V	4	0.11
LPM1813_TC331	330	5%, 10%	1 MHz, 0.1 V	6.8	0.1
LPM1813_TC471	470	5%, 10%	1 KHz, 0.1 V	8.5	0.09

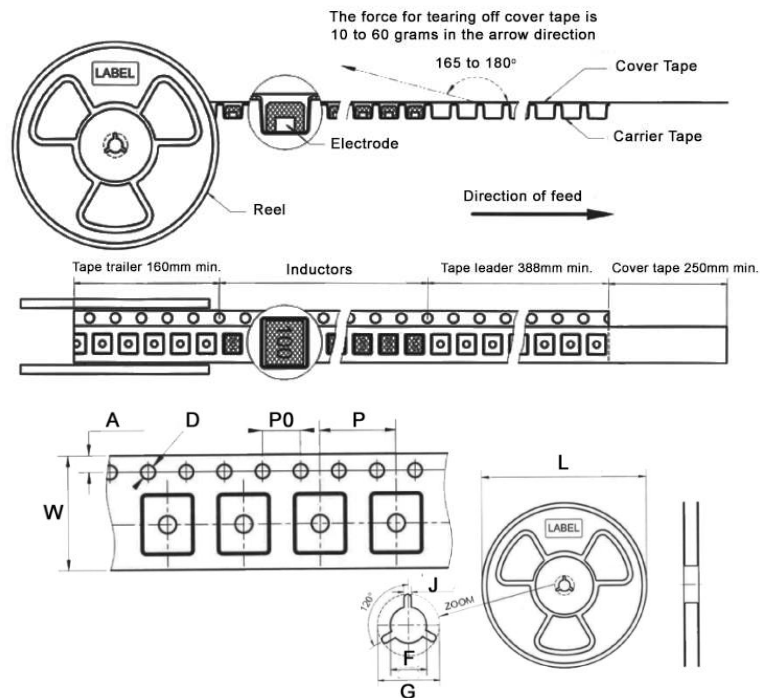
Electrical Specifications – LPM2220(C)

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	IDC (A) max
LPM2220MTCR12	0.12	20%	1 MHz, 0.1 V	0.0098	6
LPM2220MTCR27	0.27	20%	1 MHz, 0.1 V	0.014	5.3
LPM2220MTCR47	0.47	20%	1 MHz, 0.1 V	0.0182	4.8
LPM2220MTC1R0	1.0	20%	1 MHz, 0.1 V	0.027	4
LPM2220MTC1R5	1.5	20%	1 MHz, 0.1 V	0.031	3.7
LPM2220MTC2R2	2.2	20%	1 MHz, 0.1 V	0.041	3.2
LPM2220MTC3R3	3.3	20%	1 MHz, 0.1 V	0.05	2.9
LPM2220MTC4R7	4.7	20%	1 MHz, 0.1 V	0.574	2.7
LPM2220MTC6R8	6.8	20%	1 MHz, 0.1 V	0.104	2
LPM2220_TC100	10	10%, 20%	1 MHz, 0.1 V	0.13	1.7
LPM2220_TC150	15	10%, 20%	1 MHz, 0.1 V	0.21	1.4
LPM2220_TC220	22	10%, 20%	1 MHz, 0.1 V	0.266	1.2
LPM2220_TC270	27	10%, 20%	1 MHz, 0.1 V	0.3	1
LPM2220_TC330	33	10%, 20%	1 MHz, 0.1 V	0.448	0.9
LPM2220_TC470	47	10%, 20%	1 MHz, 0.1 V	0.56	0.8
LPM2220_TC680	68	10%, 20%	1 MHz, 0.1 V	0.938	0.64
LPM2220_TC101	100	10%, 20%	100 KHz, 0.1 V	1.204	0.56
LPM2220_TC151	150	10%, 20%	100 KHz, 0.1 V	2.66	0.42
LPM2220_TC221	220	10%, 20%	100 KHz, 0.1 V	3.36	0.32
LPM2220_TC331	330	10%, 20%	100 KHz, 0.1 V	6.16	0.27
LPM2220_TC471	470	10%, 20%	100 KHz, 0.1 V	7.56	0.24

Electrical Specifications – LPM2220(C) (cont.)

Type / Code	L (uH)	Tolerance	Test Condition	DCR (Ω) max	IDC (A) max
LPM2220_TC681	680	10%, 20%	100 KHz, 0.1 V	11.34	0.19
LPM2220_TC102	1000	10%, 20%	10 KHz, 0.1 V	14.42	0.15
LPM2220_TC222	2200	10%, 20%	10 KHz, 0.1 V	30.1	0.1
LPM2220_TC472	4700	10%, 20%	10 KHz, 0.1 V	61.04	0.07
LPM2220_TC103	10000	10%, 20%	10 KHz, 0.1 V	140	0.05

Packaging Specifications



Type / Code	A	D	P0	P	W	F	G	J	L	Unit
LPM1008	0.069 ± 0.004 1.75 ± 0.10	0.059 ± 0.004 1.50 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.157 4.00	0.315 8.00	0.512 ± 0.039 13.00 ± 1.00	0.906 ± 0.039 23.00 ± 1.00	0.098 ± 0.020 2.50 ± 0.50	12.992 ± 7.008 330.00 ± 178.00	Inches mm
LPM1008(HP)	0.069 ± 0.004 1.75 ± 0.10	0.059 ± 0.004 1.50 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.157 4.00	0.315 8.00	0.512 ± 0.039 13.00 ± 1.00	0.906 ± 0.039 23.00 ± 1.00	0.098 ± 0.020 2.50 ± 0.50	12.992 ± 7.008 330.00 ± 178.00	Inches mm
LPM1010	0.069 ± 0.004 1.75 ± 0.10	0.059 ± 0.004 1.50 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.157 4.00	0.315 8.00	0.512 ± 0.039 13.00 ± 1.00	0.906 ± 0.039 23.00 ± 1.00	0.098 ± 0.020 2.50 ± 0.50	12.992 ± 7.008 330.00 ± 178.00	Inches mm
LPM1310	0.069 ± 0.004 1.75 ± 0.10	0.059 ± 0.004 1.50 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.157 4.00	0.315 8.00	0.512 ± 0.039 13.00 ± 1.00	0.906 ± 0.039 23.00 ± 1.00	0.098 ± 0.020 2.50 ± 0.50	12.992 ± 7.008 330.00 ± 178.00	Inches mm
LPM1310(HP)	0.069 ± 0.004 1.75 ± 0.10	0.059 ± 0.004 1.50 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.315 8.00	0.472 12.00	0.512 ± 0.039 13.00 ± 1.00	0.906 ± 0.039 23.00 ± 1.00	0.098 ± 0.020 2.50 ± 0.50	12.992 ± 7.008 330.00 ± 178.00	Inches mm
LPM1813	0.069 ± 0.004 1.75 ± 0.10	0.059 ± 0.004 1.50 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.315 8.00	0.472 12.00	0.512 ± 0.039 13.00 ± 1.00	0.906 ± 0.039 23.00 ± 1.00	0.098 ± 0.020 2.50 ± 0.50	12.992 ± 7.008 330.00 ± 178.00	Inches mm
LPM2220	0.069 ± 0.004 1.75 ± 0.10	0.059 ± 0.004 1.50 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.472 12.00	0.630 16.00	0.512 ± 0.039 13.00 ± 1.00	0.906 ± 0.039 23.00 ± 1.00	0.098 ± 0.020 2.50 ± 0.50	12.992 ± 7.008 330.00 ± 178.00	Inches mm

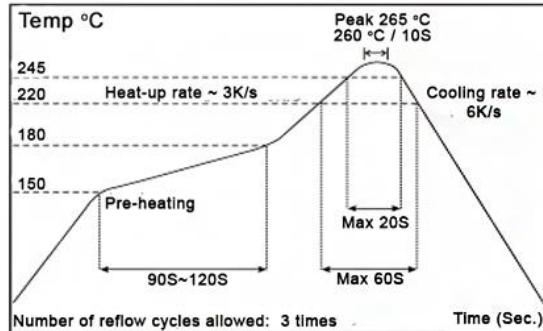
Environmental Specifications - General

Items	Specifications
Shelf Storage Conditions	Temperature range: 25 ± 3 °C. Humidity: < 80% relative humidity. Recommended product should be used within six months from the time of delivery.
Operating Temperature Range	-40 °C to +125 °C

Environmental Test		
Test	Test Specification	Test Condition
High Temperature Storage Test	No case deformation or change in appearance. $\Delta L/L \leq 10\%$	Temperature $85 \pm 2 \text{ }^\circ\text{C}$ Time: 48 ± 2 hours Tested after 1 hour at room temperature
Low Temperature Storage Test		Temperature $-25 \pm 2 \text{ }^\circ\text{C}$ Time: 48 ± 2 hours Tested after 1 hour at room temperature
Humidity Test		Temperature $40 \pm 2 \text{ }^\circ\text{C}$, 90 ~ 95% relative humidity Time: 96 ± 2 hours Tested after 1 hour at room temperature
Thermal Shock Test		First $-25 \text{ }^\circ\text{C}$ 30 minutes, then $25 \text{ }^\circ\text{C}$ 10 minutes, last $85 \text{ }^\circ\text{C}$ 30 minutes, as 1 cycle. Go through 5 cycles. Tested after 1 hour at room temperature

Mechanical Test		
Test	Test Specification	Test Condition
Solderability Test	Terminal area must have 90% minimum solder coverage	Product with lead-free terminal: Dip pads in flux then dip in solder pot at $245 \pm 5 \text{ }^\circ\text{C}$ for 3 seconds
Resistance to Soldering Heat	No case deformation or change in appearance	Flux should cover the whole of the sample before heating, then be preheated for about 2 minutes over temperature of $130 \sim 150 \text{ }^\circ\text{C}$. immersing to $260 \pm 5 \text{ }^\circ\text{C}$ for 10 seconds
Vibration Test	No case deformation or change in appearance $\Delta L/L \leq 10\%$	Apply frequency 10 ~ 55 Hz 1.5 mm amplitude in each of perpendicular direction for 2 hours
Shock Resistance		Drop down with 981 m/s^2 (100 G) shock attitude upon a rubber block method shock testing machine for 1 time in each of three orientations.

Reflow Chart:



RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union’s directive regarding “Restrictions on Hazardous Substances” (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status						
Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
LPM	Miniature Wirewound Surface Mount Power Inductor	SMD	YES	100% Matte Sn	Aug-05	05/31

“Conflict Metals” Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the “conflict region” of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to “REACH”

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, “The Registration, Evaluation, Authorization and Restriction of Chemicals”, otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

L	P	M	1	3	1	0	M	T	C	1	R	0	-	H	P
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Product Series	Size		Tolerance		Packaging				Special		Inductance		Special					
	Code	Dimension (mm)	Code	Description	Code	Description	Size	Quantity	Code	Description	Code	Description	Code	Description				
LPM	1008	2.5 x 2 x 1.02	J	5%	T	7" Tape and Reel	1008	2000	(blank)	General Use	R12	0.12µH	(blank)	Standard				
	1008-HP	2.5 x 2 x 1.2	K	10%			1008(HP)		1010	101	100µH	C	Choke Use	120	12µH	-HP	High Profile	
	1010	2.5 x 2.5 x 1.05	M	20%			1310		1310(HP)	1000	101	100µH			101	100µH		
	1310	3.2 x 2.5 x 1.55	N	30%			1813		1813	500	102	1000µH						
	1310-HP	3.2 x 2.5 x 2					2220		2220	1000								
	1813	4.5 x 3.2 x 2.6																
	2220	5.7 x 5 x 4.7				13" Tape and Reel												

Legacy Part Number:

V	L	H	4	5	3	2	2	6	C	-	1	0	1	K
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Product Series	Code	Dimension	Special		Special		Inductance		Tolerance	
			Code	Description	Code	Description	Code	Inductance	Code	Tol
VLH SMD Choke Chip	252010	2.5x2.0x1.02	Blank	General Use	-	Standard	R12	0.12µH	J	± 5%
	252012	2.5x2.0x1.2	C	Choke Use	S	Shielded	120	12µH	K	± 10%
	252510	2.5x2.5x1.05					101	100µH	M	± 20%
	322515(C)	3.2x2.5x1.55					102	1000µH	N	± 30%
	322520(C)	3.2x2.5x2.0								
	453226(C)	4.5x3.2x2.6								
	575047(C)	5.7x5.0x4.7								