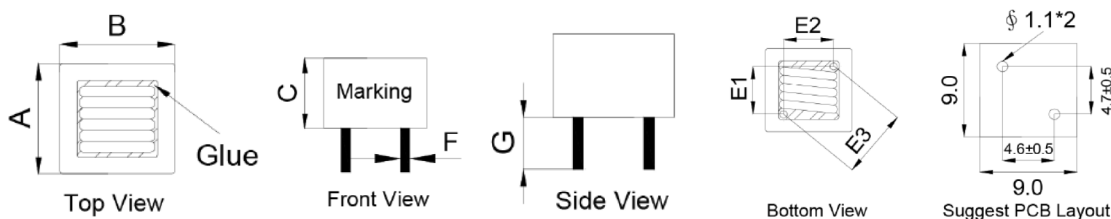


Unshielded Power Inductors - Radial Leaded

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**RoHS
Compliant**



Part Number	A	B	C	E1	E2	E3	F	G
MP005770	7.8 ±0.4		6 ±0.5	4.7 ±0.5	4.6 ±0.5	6.5 ±0.5	Ø0.8 ±0.1	3.5 ±0.5
MP005772	8.5 (Max.)		6.3 (Max.)	4.8 ±0.5	4.7 ±0.5	6.7 ±0.5	Ø0.7 ±0.1	
MP005773	8 ±0.3		6 ±0.5	4.7 ±0.5	4.6 ±0.5	6.6 ±0.5	Ø0.7 ±0.1	

Electrical Characteristics

Part Number	L (µH) ± Tol	DCR (mΩ)	Isat (A)	Irms (A)	Op. Temp
MP005770	1 ±15%	3 ±7%	23	18	-55°C to +130°C
MP005772	1 ±20%	4.3 ±8%	22	18	-25°C to 125°C.
MP005773	1.5 ±15%	5.05 ±7%	18	13	-55°C to +130°C

Notes:

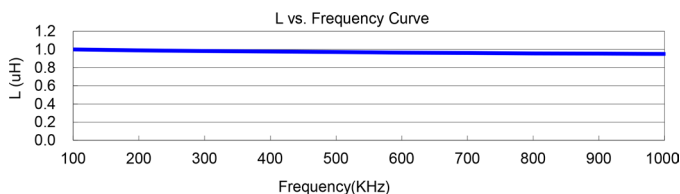
1. L is measured at: 100KHz, 1.0V @ 25°C.
2. Isat: DC current that causes inductance to drop by approximately 20% from L
3. Irms: DC current that causes an approximate temperature rise (ΔT) of 40°C.

Unshielded Power Inductors - Radial Leaded

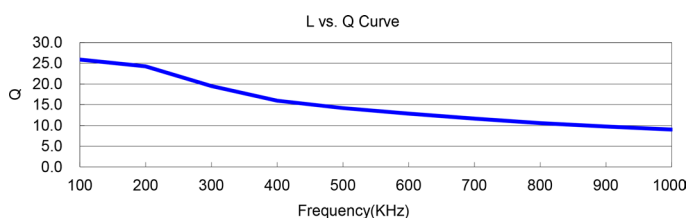
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Electric Characteristics Curve.

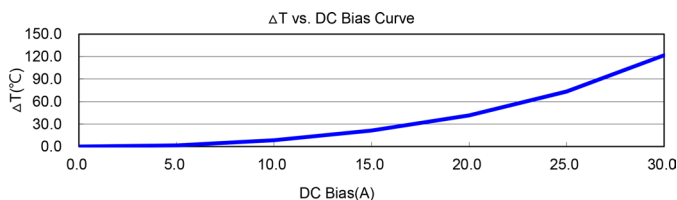
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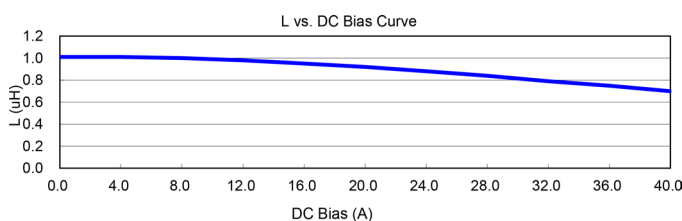
Frequency(KHz)	100	200	300	400	500	600	700	800	900	1000
L (uH)	1	0.99	0.98	0.98	0.97	0.96	0.96	0.96	0.95	0.95



Frequency(KHz)	100	200	300	400	500	600	700	800	900	1000
Q	25.87	24.26	19.51	15.98	14.20	12.86	11.65	10.57	9.75	9.02



DC Bias(A)	0	5	10	15	20	25	30
$\Delta T(^{\circ}C)$	0	1.6	8.5	21.3	41.5	73.4	121.8



DC Bias(A)	0	4	8	12	16	20	24	28	32	36	40
L (uH)	1.01	1.01	1	0.98	0.95	0.92	0.88	0.84	0.79	0.75	0.7

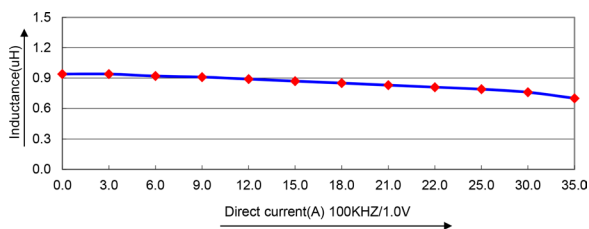
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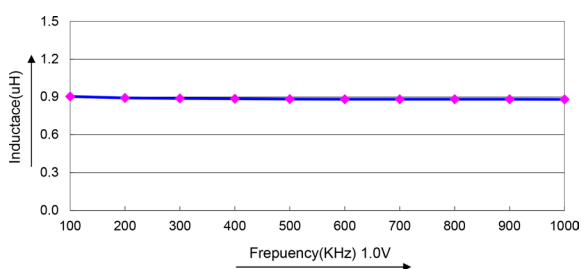
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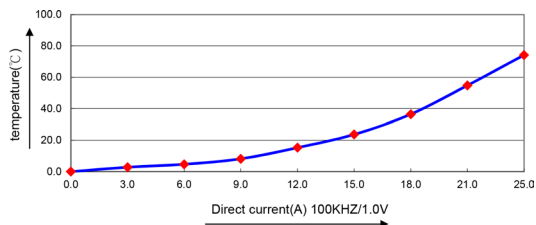
MP005772



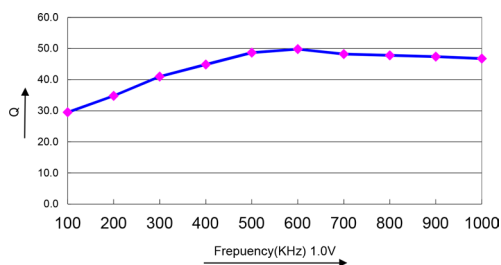
Direct current(A)	0	3	6	9	12	15	18	21	22	25	30	35
Inductance(uH)	0.94	0.94	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.76	0.7



Frequency(KHz)	100	200	300	400	500	600	700	800	900	1000
Inductance(uH)	0.903	0.892	0.888	0.885	0.883	0.882	0.882	0.881	0.881	0.88



Direct current(A)	0.0	3	6	9	12	15	18	21	25
temperature(°C)	0.0	2.8	4.7	8.2	15.3	23.7	36.5	54.8	74.2



Frequency(KHz)	100	200	300	400	500	600	700	800	900	1000
Quality Factor	29.5	34.8	41	44.9	48.7	49.8	48.2	47.8	47.4	46.8

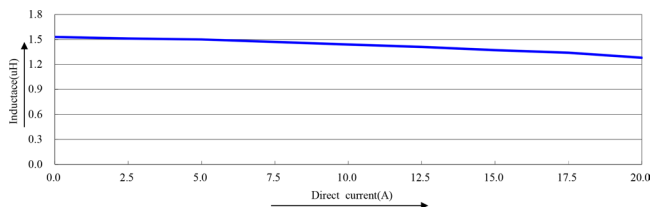
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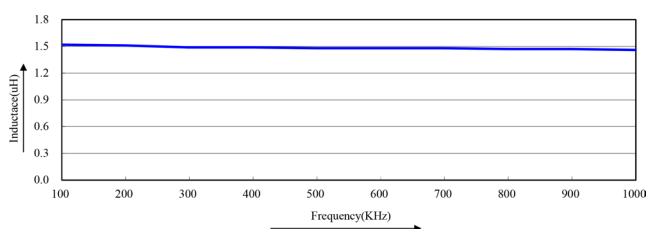
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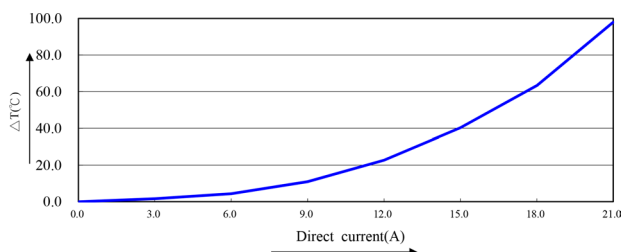
MP005773



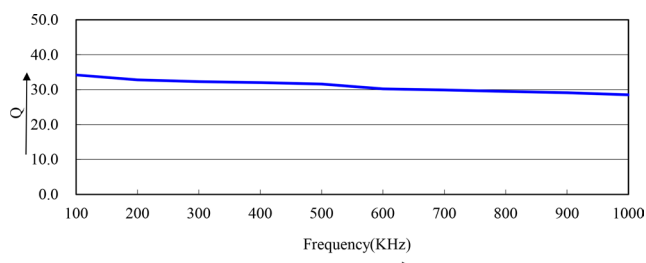
Direct current(A)	0	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25
Inductance(uH)	1.53	1.51	1.5	1.47	1.44	1.41	1.37	1.34	1.28	1.22	1.16



Frequency(KHz)	100	200	300	400	500	600	700	800	900	1000
Inductance(uH)	1.52	1.51	1.49	1.49	1.48	1.48	1.48	1.47	1.47	1.46



Direct current(A)	0	3	6	9	12	15	18	21
ΔT(°C)	0	1.6	4.4	11	22.6	40.3	63.3	97.9



Frequency(KHz)	100	200	300	400	500	600	700	800	900	1000
Q	34.2	32.8	32.3	32	31.6	30.2	29.9	29.5	29.1	28.5

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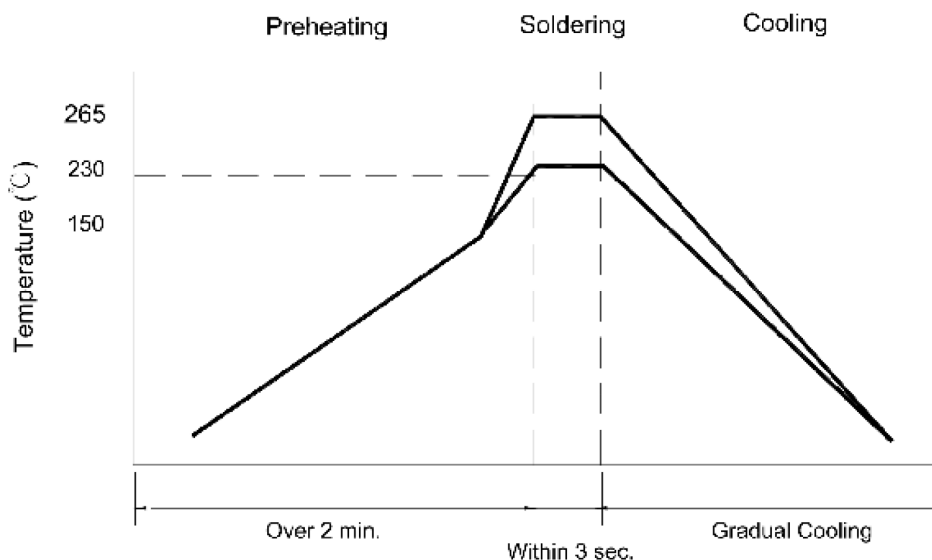
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Unshielded Power Inductors - Radial Leaded

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Recommended Soldering Technologies

Wave Soldering Profile



Note:

The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.

Part Number Table

Description	Part Number
Power Inductor, Unshielded, 1 μ H, 15%, Radial Leaded	MP005770
Power Inductor, Unshielded, 1 μ H, 20%, Radial Leaded	MP005772
Power Inductor, Unshielded, 1.5 μ H, 15%, Radial Leaded	MP005773

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