

Inductors

For General Applications

SMD

MLF Series MLF1608-J Type

FEATURES

- As multilayer chip inductor using ferrite material, it is the first narrow tolerance(±5%) small inductor in the industry.
- This inductor is complete by E-12 series to 0.1–4.7μH.
- Inductance change by soldering is less than 1/3 from elegance conventionally.
- Maintains the same dimensions and electrical characteristics as that of the conventional MLF series.
- The products contain no lead and also support lead-free soldering.

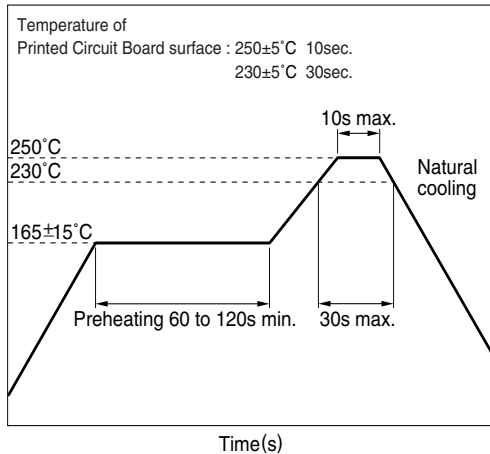
APPLICATIONS

Signal processing such as cellular phone, car audio, tuner, DVC.

SPECIFICATIONS

Operating temperature range	-55 to +125°C
Storage temperature range	-55 to +125°C[Unit of products]

RECOMMENDED REFLOW SOLDERING CONDITIONS



PRODUCT IDENTIFICATION

MLF	1608	D	R10	J	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions L×W

1608	1.6×0.8×0.8mm
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(3) Material code

(4) Inductance value

R10	0.1μH
1R0	1.0μH
100	10μH

(5) Inductance tolerance

J	±5%
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(6) Packaging style

T	Taping [reel]
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PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

HANDLING AND PRECAUTIONS

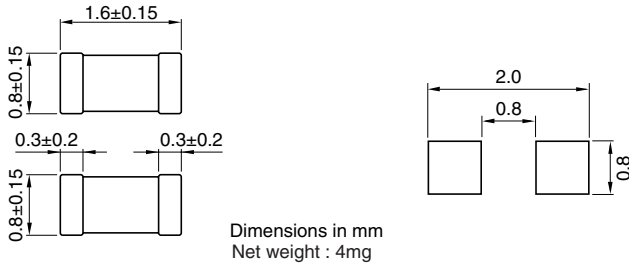
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- The inductance value may change due to magnetic saturation if the current exceeds the rated maximum.
- Do not expose the inductors to stray magnetic fields.
- Avoid static electricity discharge during handling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 300°C. Soldering time should not exceed 3 seconds.

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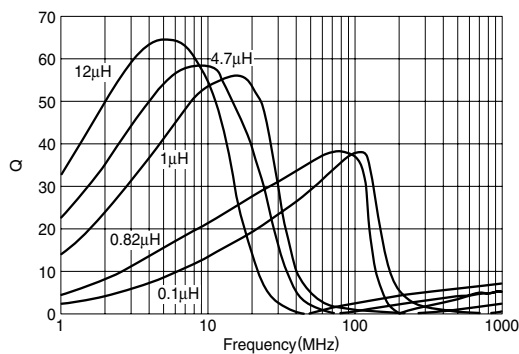
SHAPES AND DIMENSIONS/ RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance	Q min.	Self-resonant frequency min. (MHz)	DC resistance max.(Ω)	Rated current max.(mA)
MLF1608DR10J	0.1	±5%	15	450	0.35	200
MLF1608DR12J	0.12	±5%	15	400	0.40	200
MLF1608DR15J	0.15	±5%	15	350	0.45	200
MLF1608DR18J	0.18	±5%	15	320	0.50	150
MLF1608DR22J	0.22	±5%	15	290	0.55	150
MLF1608DR27J	0.27	±5%	15	260	0.60	150
MLF1608DR33J	0.33	±5%	15	230	0.75	100
MLF1608DR39J	0.39	±5%	15	210	0.85	100
MLF1608DR47J	0.47	±5%	15	190	0.95	100
MLF1608DR56J	0.56	±5%	15	170	1.05	100
MLF1608DR68J	0.68	±5%	15	150	1.25	70
MLF1608DR82J	0.82	±5%	15	130	1.40	70
MLF1608A1R0J	1.0	±5%	35	120	0.50	50
MLF1608A1R2J	1.2	±5%	35	110	0.65	50
MLF1608A1R5J	1.5	±5%	35	100	0.70	50
MLF1608A1R8J	1.8	±5%	35	90	0.85	50
MLF1608A2R2J	2.2	±5%	35	80	1.00	30
MLF1608A2R7J	2.7	±5%	35	70	1.15	30
MLF1608A3R3J	3.3	±5%	35	65	1.30	30
MLF1608A3R9J	3.9	±5%	35	60	1.45	30
MLF1608A4R7J	4.7	±5%	35	55	1.60	30
MLF1608E5R6J	5.6	±5%	35	45	1.10	15
MLF1608E6R8J	6.8	±5%	35	40	1.30	15
MLF1608E8R2J	8.2	±5%	35	35	1.50	10
MLF1608E100J	10.0	±5%	30	30	1.70	10
MLF1608E120J	12.0	±5%	30	25	1.80	10

TYPICAL ELECTRICAL CHARACTERISTICS Q vs. FREQUENCY CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS

