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.
- Lead free solder correspondence component.

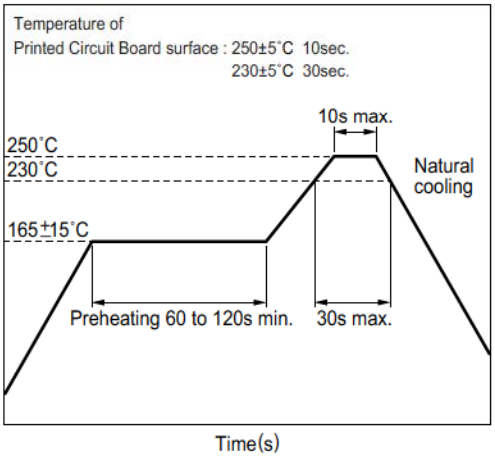
APPLICATIONS

Cellular phone, tuner, TV, radio, DVC, etc.

SPECIFICATIONS

Operating temperature range	–25 to +85°C
Storage temperature range	–40 to +85°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

(3) Material code

(4) Inductance value

R10	0.1μH
1R0	1.0μH

(5) Inductance tolerance

J	±5%

(6) Packaging style

T	Taping [reel]

PACKAGING STYLE AND QUANTITIES

Packaging style	Type	Quantity
Taping	MLF1608-J	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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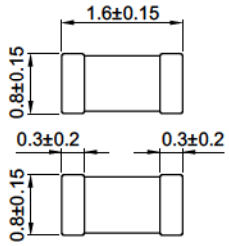
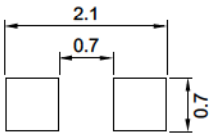
SHAPES AND DIMENSIONS/ RECOMMENDED PC BOARD PATTERN





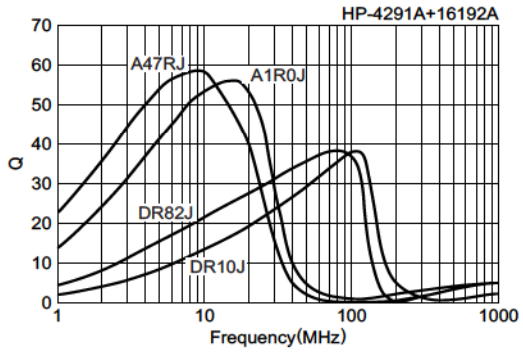
Dimensions in mm
Net weight : 4mg

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	240	0.5	50
MLF1608DR12J	0.12	±5%	15	205	0.5	50
MLF1608DR15J	0.15	±5%	15	180	0.6	50
MLF1608DR18J	0.18	±5%	15	165	0.6	50
MLF1608DR22J	0.22	±5%	15	150	0.8	50
MLF1608DR27J	0.27	±5%	15	136	0.8	50
MLF1608DR33J	0.33	±5%	15	125	0.85	35
MLF1608DR39J	0.39	±5%	15	110	1	35
MLF1608DR47J	0.47	±5%	15	105	1.35	35
MLF1608DR56J	0.56	±5%	15	95	1.55	35
MLF1608DR68J	0.68	±5%	15	90	1.7	35
MLF1608DR82J	0.82	±5%	15	85	2.1	35
MLF1608A1R0J	1.0	±5%	35	75	0.6	25
MLF1608A1R2J	1.2	±5%	35	65	0.8	25
MLF1608A1R5J	1.5	±5%	35	60	0.8	25
MLF1608A1R8J	1.8	±5%	35	55	0.95	25
MLF1608A2R2J	2.2	±5%	35	50	1.15	15
MLF1608A2R7J	2.7	±5%	35	45	1.35	15
MLF1608A3R3J	3.3	±5%	35	40	1.55	15
MLF1608A3R9J	3.9	±5%	35	35	1.7	15
MLF1608A4R7J	4.7	±5%	35	33	2.1	15

TYPICAL ELECTRICAL CHARACTERISTICS

Q vs. FREQUENCY CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS