

SMD Inductors(Coils) For Power Line(Multilayer, Magnetic Shielded)

Conformity to RoHS Directive

MLZ Series MLZ2012

This is a multilayered inductor primarily designed for choking power lines. With one of the best resistance performance in the industry, this product delivers a significantly lower DC resistance value compared to our previous products. This reduces the loss at the power supply and contributes to power conservation.

FEATURES

- Significantly reduced Rdc.
- An inductance value of 4.7 μ H was realized at a thickness of 0.85mm. This contributes to space saving.
- Automatic mounting in tape and reel package.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

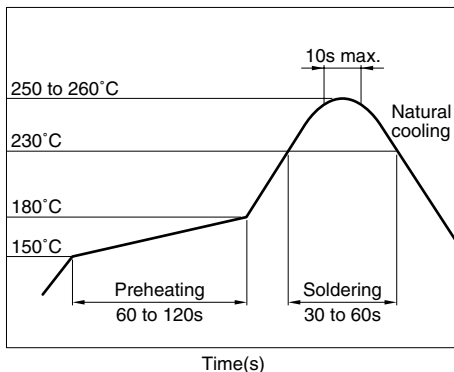
APPLICATIONS

Choke coil to use for DVC, DSC, MD, power supply circuit such as various module.

SPECIFICATIONS

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

RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



PRODUCT IDENTIFICATION

MLZ	2012	A	1R0	P	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions L×W

2012	2.0×1.25mm
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(3) Material code

(4) Inductance value

1R0	1.0 μ H
100	10.0 μ H

(5) Inductance tolerance

M	\pm 20%
P	\pm 25%

(6) Packaging style

T	Taping [reel]
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PACKAGING STYLE AND QUANTITIES

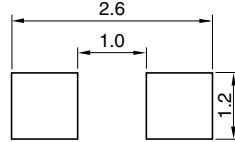
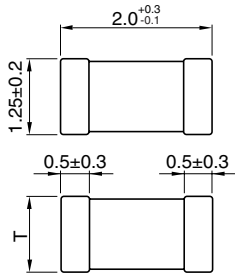
Packaging style	Thickness T(mm)	Quantity
Taping	0.85	4000 pieces/reel
	1.25	2000 pieces/reel

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• Please contact our Sales office when your application are considered the following:
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

• All specifications are subject to change without notice.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Dimensions in mm

ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance	Thickness (mm)	Test frequency L (MHz)	Test current L (mA)	Self-resonant frequency (MHz) typ.	DC resistance (Ω) ±30%	Rated current (mA)
MLZ2012A1R0□*T	1.0	±20, ±25%	0.85	10	1.0	160	0.12	220
MLZ2012A2R2□T	2.2	±20, ±25%	0.85	10	1.0	100	0.20	160
MLZ2012E4R7□T	4.7	±20, ±25%	0.85	2	0.1	70	0.30	80
MLZ2012E100□T	10.0	±20, ±25%	1.25	2	0.1	30	0.40	60

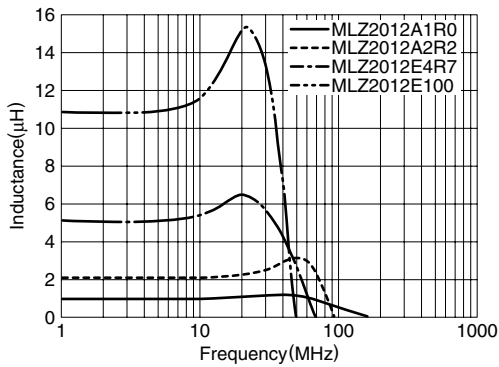
* □: Please specify inductance tolerance, M(±20%) or P(±25%)

• Test equipment

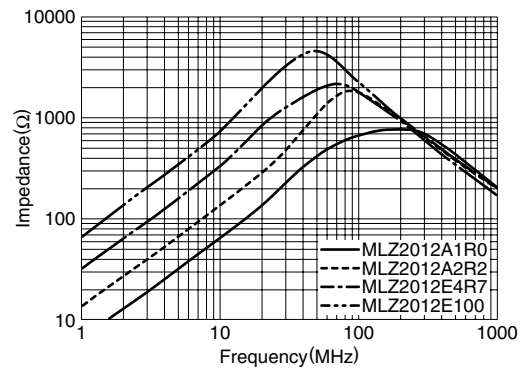
Inductance, Q: HP4291B-16192A

TYPICAL ELECTRICAL CHARACTERISTICS

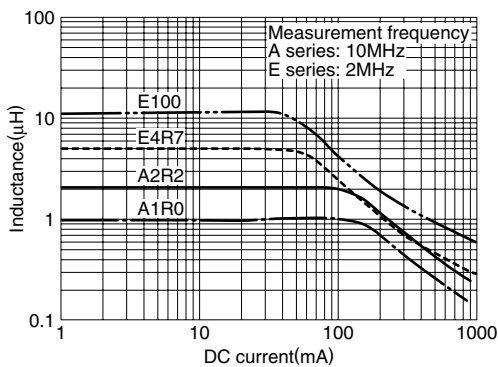
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



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