

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

Conformity to RoHS Directive

MLP Series MLP2520

In response to market demands for smaller mobile devices with a longer lasting life, mounted switching supply circuits with even higher frequencies are now being developed.

With optimized materials the MLP2520 type contributes to the improved efficiency of power sources, and reduces the losses caused by ferrite, even if the products are used for supply circuits with high drive frequencies.

FEATURES

- Optimized ferrite materials enable the reduction of losses.
- Compared to the existing MLP2520 type, DC superposition characteristics have been substantially improved.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

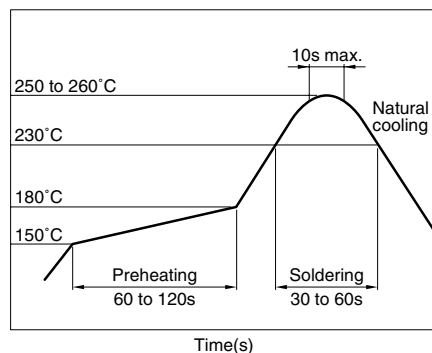
APPLICATIONS

Cellular phones, DSCs, DVCs, HDs, etc.

SPECIFICATIONS

Operating temperature range	-40 to +85°C
Storage temperature range	-40 to +85°C

RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



PRODUCT IDENTIFICATION

MLP	2520	S	1R0	M	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions L×W

2520	2.5×2.0mm
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(3) Product characteristics classification code

S	STD
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(4) Inductance value

1R0	1.0μH
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(5) Management number

M	t=1.0mm max.
S	t=1.2mm max.

(6) Packaging style

T	Taping [reel]
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PACKAGING STYLE AND QUANTITIES

Packaging style	Thickness T(mm)	Quantity
Taping	1.0mm max.	3000 pieces/reel
	1.2mm max.	3000 pieces/reel

HANDLING AND PRECAUTIONS

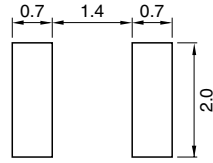
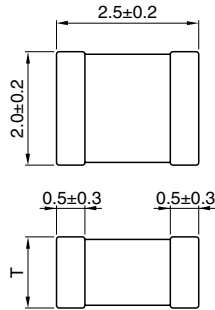
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending 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 350°C. Soldering time should not exceed 3 seconds.

• 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.)

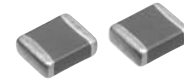
• All specifications are subject to change without notice.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Dimensions in mm

T(Thickness)	Weight(mg)
1.0max.	15
1.2max.	25



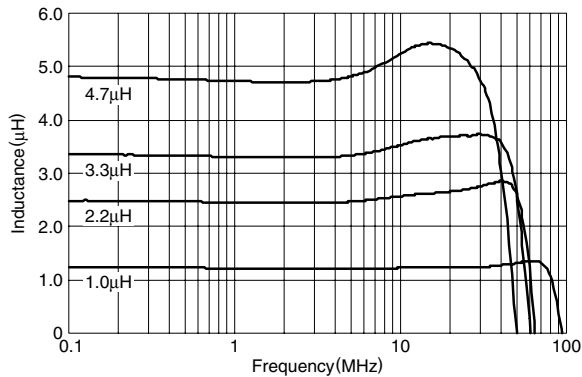
ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Inductance tolerance	Test frequency (MHz)	DC resistance (Ω)±30%	Rated current (mA)	Thickness (mm)max.
MLP2520S1R0M	1.0	±20%	2	0.085	1500	1.0
MLP2520S1R5M	1.5	±20%	2	0.09	1200	1.0
MLP2520S2R2M	2.2	±20%	2	0.09	1000	1.0
MLP2520S3R3M	3.3	±20%	2	0.15	1000	1.0
MLP2520S4R7M	4.7	±20%	2	0.15	1000	1.0
MLP2520S1R0S	1.2	±20%	2	0.08	1500	1.2
MLP2520S2R2S	2.5	±20%	2	0.11	1200	1.2
MLP2520S3R3S	3.3	±20%	2	0.11	1000	1.2
MLP2520S4R7S	4.7	±20%	2	0.11	1000	1.2

TYPICAL ELECTRICAL CHARACTERISTICS

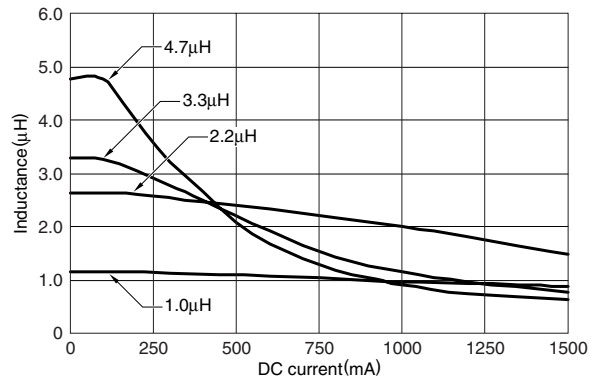
INDUCTANCE vs. FREQUENCY CHARACTERISTICS

T=1.2mm max.

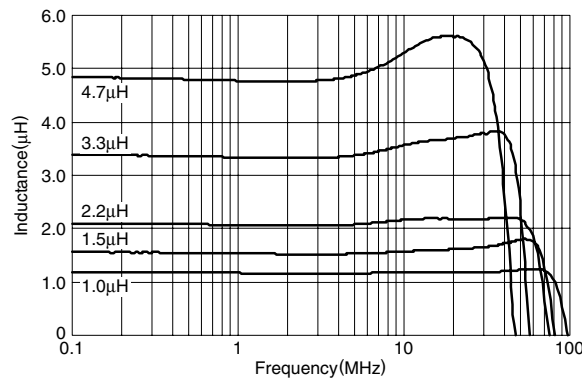


INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS

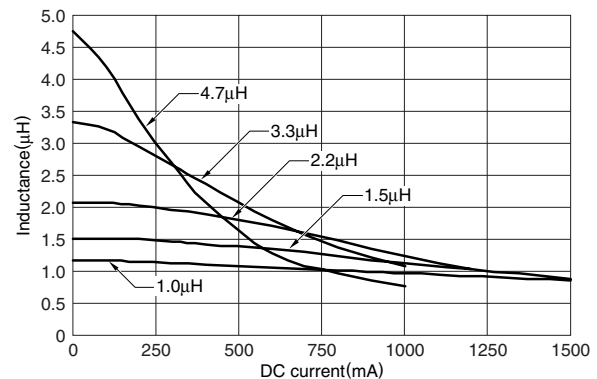
T=1.2mm max.



T=1.0mm max.



T=1.0mm max.



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