

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

Conformity to RoHS Directive

SPM Series SPM6530

The SPM6530 is a large-current SMD power inductor that uses a magnetic metal material.

This product has good superimposition characteristics and low DC resistance.

FEATURES

- Small footprint and Low profile design
Footprint: 7.1×6.5mm
Height: 3.0mm max.
- High power handling capability:
Small copper loss
Using large saturation induction of Fe-based metals
- A high Curie temperature of about 550°C means low inductance temperature variance.
- Available for automatic mounting in tape and reel package.

APPLICATIONS

Note book type computers, VRMs, etc.

PRODUCT IDENTIFICATION

SPM	6530	T	- 3R3	- M
(1)	(2)	(3)	(4)	(5)

(1) Series name

(2) Dimensions L×H

6530 6.5×3.0mm max.

(3) Packaging style

T Embossed carrier tape

(4) Inductance value

3R3 3.3μH

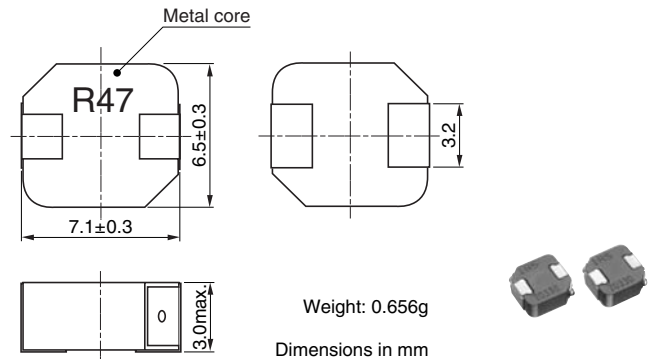
(5) Inductance tolerance

M ±20%

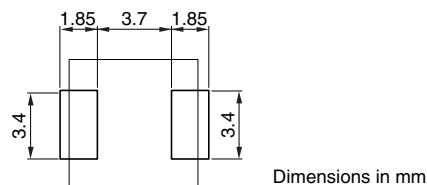
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	1000 pieces/reel

SHAPES AND DIMENSIONS



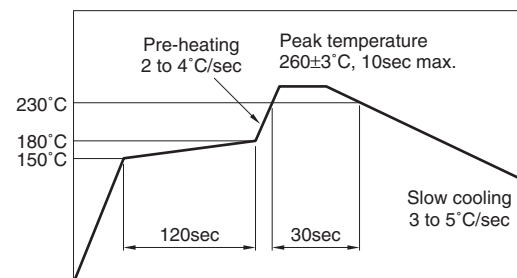
RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM



RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



HANDLING AND PRECAUTIONS

- Please contact us before cleaning this product.
- Maintain a safe distance between this product and other components according to the working voltage.
- If this product is left in a humid environment for a long period of time, rust may appear on the surface. However, this does not affect performance.

• 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.

ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Tolerance (%)	Test frequency (kHz)	DC resistance($\text{m}\Omega$)		Rated current(A)*	
				max.	typ.	Based on inductance change typ.	Based on temperature rise typ.
SPM6530T-R25M230	0.25	± 20	100	2.31	2.1	28.5	23
SPM6530T-R47M170	0.47	± 20	100	3.63	3.3	20.5	20
SPM6530T-R68M140	0.68	± 20	100	5.39	4.9	16.6	16
SPM6530T-1R0M120	1	± 20	100	7.81	7.1	14.1	13
SPM6530T-1R5M100	1.5	± 20	100	10.67	9.7	11.5	11
SPM6530T-2R2M	2.2	± 20	100	19	17.3	8.4	8.2
SPM6530T-3R3M	3.3	± 20	100	29.7	27	7.3	6.8
SPM6530T-4R7M	4.7	± 20	100	39.4	35.8	6.2	5.6

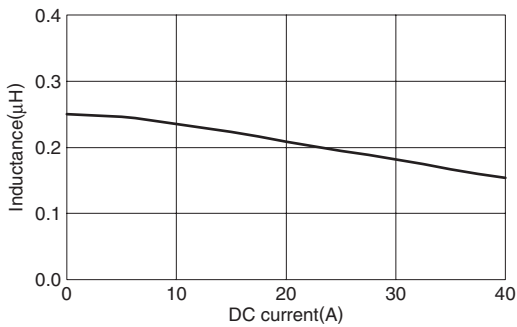
* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 20%, whichever is smaller.

- Operating temperature range: -40 to +125°C (Including self-temperature rise)
- The cleaning agent can not be used for these parts.

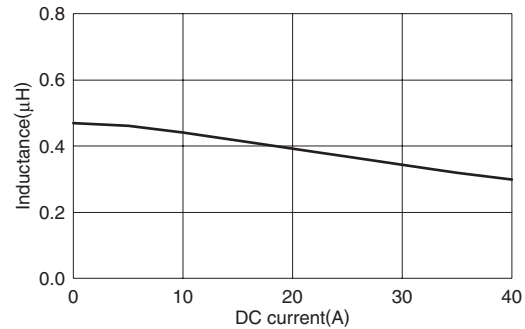
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS

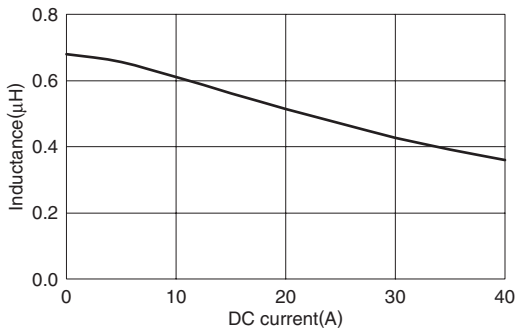
SPM6530T-R25M230



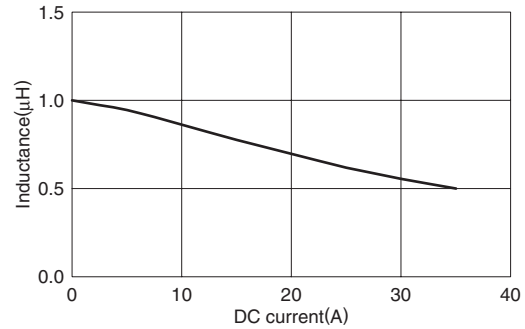
SPM6530T-R47M170



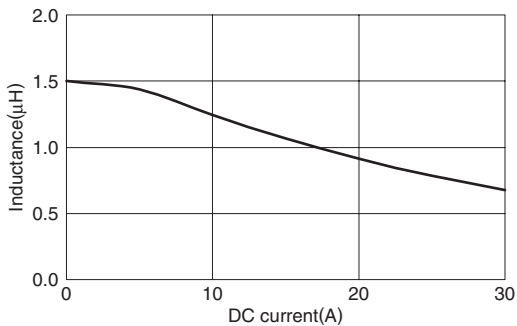
SPM6530T-R68M140



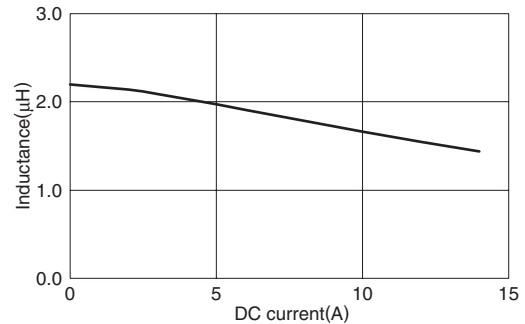
SPM6530T-1R0M120



SPM6530T-1R5M100



SPM6530T-2R2M

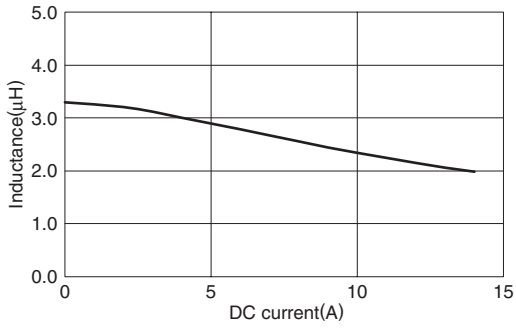


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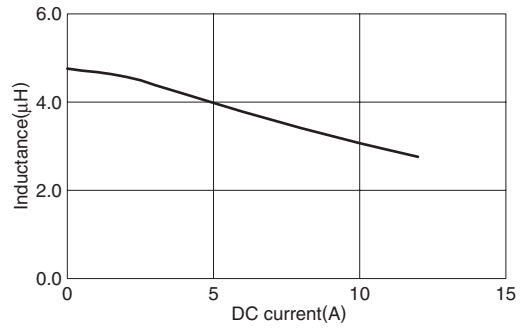
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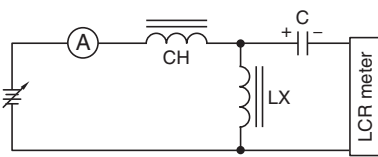
SPM6530T-3R3M



SPM6530T-4R7M

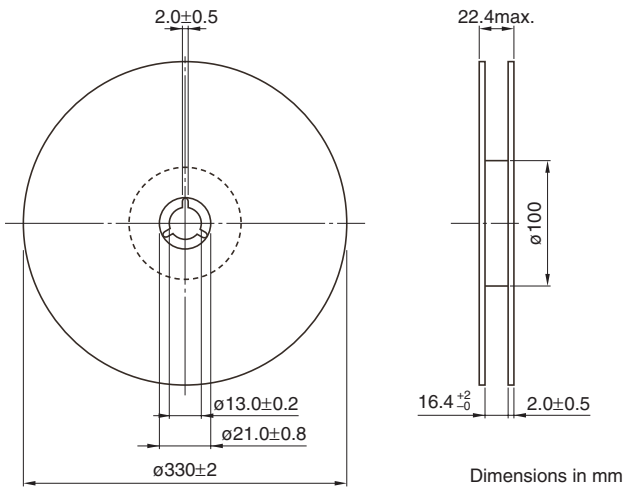


TEST CIRCUIT

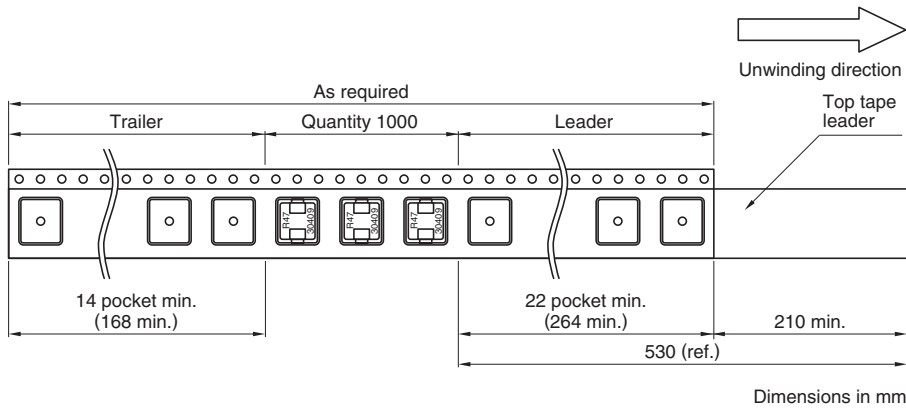


PACKAGING STYLES

REEL DIMENSIONS



TAPE DIMENSIONS



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