

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

Conformity to RoHS Directive

SPM Series SPM5030

The SPM5030 contains SMD inductors for large currents. They have a high saturation current, and the DC superimposition characteristics have low temperature variance. This series can meet the needs of customers requiring products smaller than the SPM6530.

FEATURES

- Small and low profile design
Size: 5.2×5.0mm
Height: 3.0mm max.
- High power handling capability:
Small copper loss
Using large saturation induction of Fe-based metals
- Wide operating temperature range due to high Curie temperature of around 550°C.
- Available for automatic mounting in tape and reel package.

APPLICATIONS

Note book type computers, servers, VRMs, etc.

PRODUCT IDENTIFICATION

SPM	5030	T	-	□□□	-	□
(1)	(2)	(3)	(4)	(5)		

(1) Series name

(2) Dimensions L×H

5030	5.0×3.0mm max.
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(3) Packaging style

T	Embossed carrier tape
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(4) Inductance value

R20	0.20μH
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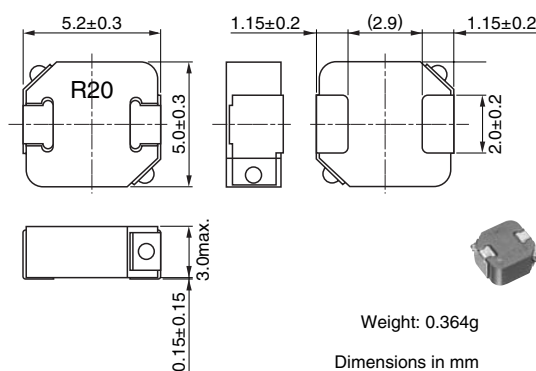
(5) Inductance tolerance

M	±20%
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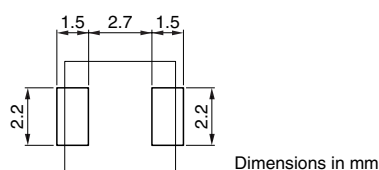
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 pieces/reel

SHAPES AND DIMENSIONS



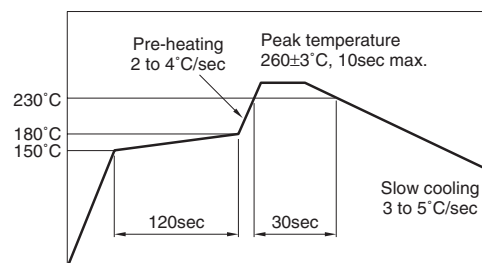
RECOMMENDED PC BOARD PATTERN



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(m Ω)		Rated current(A)*	
				max.	typ.	Based on inductance change typ.	Based on temperature rise typ.
SPM5030-R20M	0.20	± 20	100	2.31	2.1	21.0	22.2
SPM5030-R35M	0.35	± 20	100	4.29	3.9	14.9	16.6
SPM5030-R75M	0.75	± 20	100	9.35	8.5	9.7	11.3

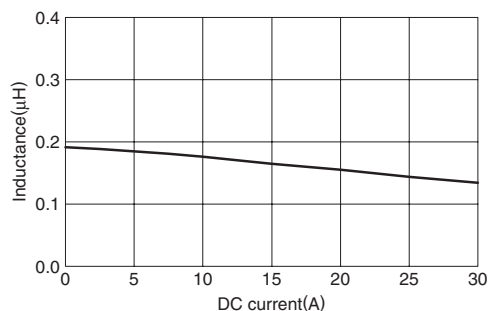
* Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 20%, whichever is smaller.

- Operating temperature range: -40 to +125°C (Including self-temperature rise)

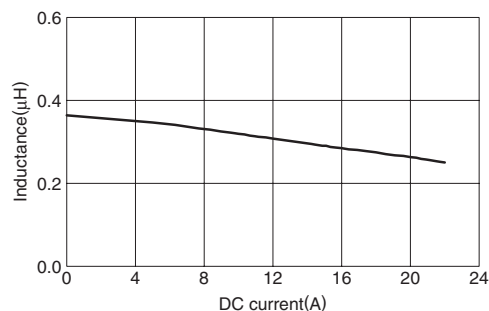
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS

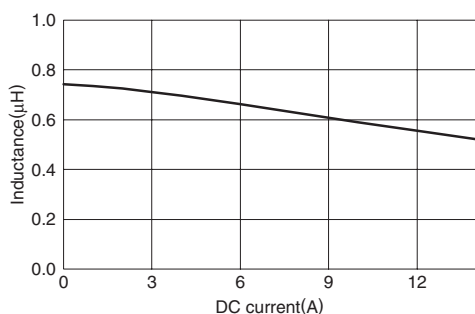
SPM5030T-R20M



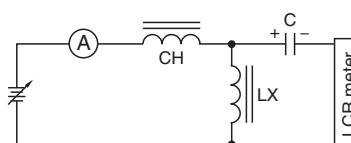
SPM5030T-R35M



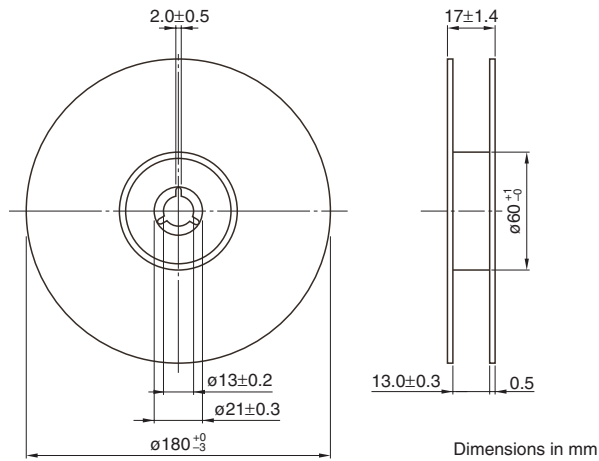
SPM5030T-R75M



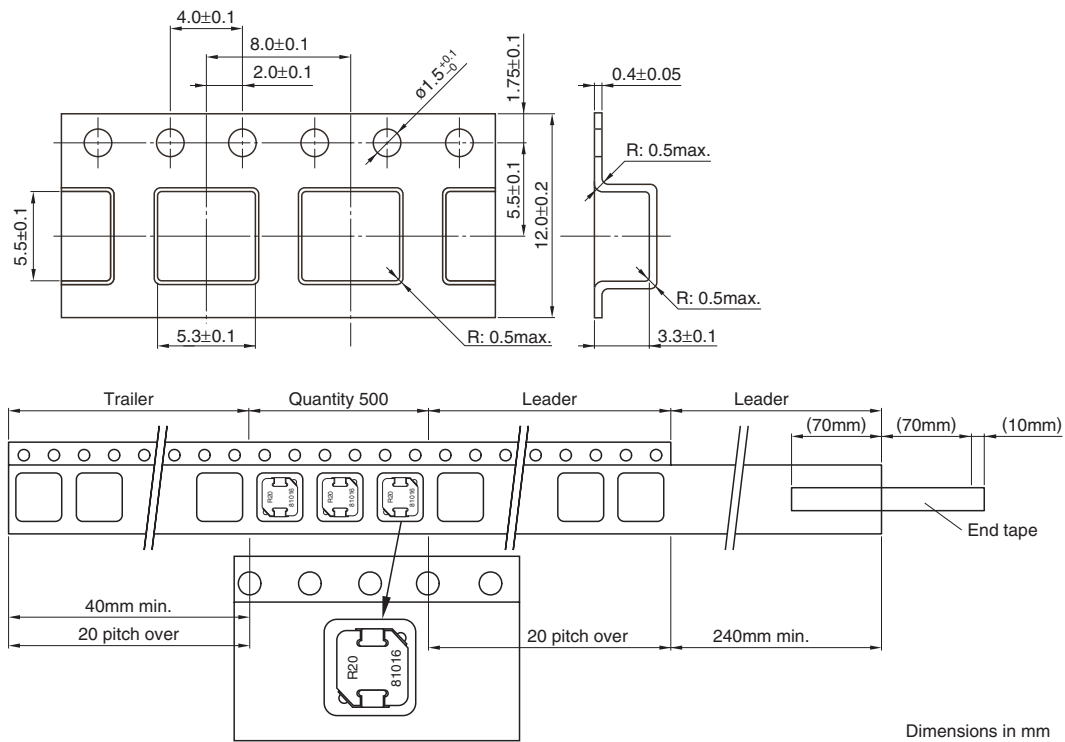
TEST CIRCUIT



PACKAGING STYLES REEL DIMENSIONS



TAPE DIMENSIONS



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