



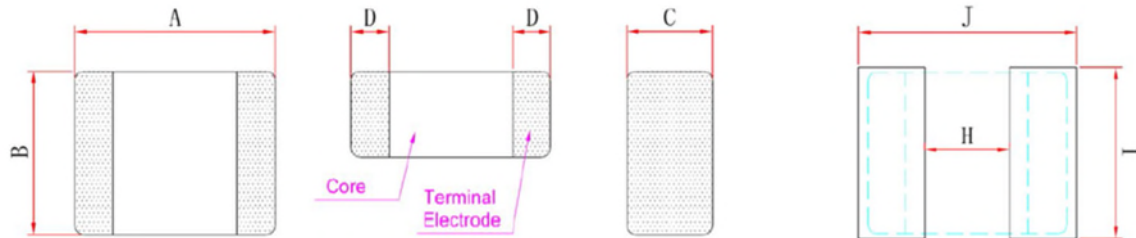
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**Shielded SMT High Current Power Inductor
AEC-Q200 standard compliance
SPHA2520 series**

■ SHAPES AND DIMENSIONS



Unit: mm

Item	A	B	C	D	H	I	J
SPHA252012	2.5±0.3	2.0±0.3	1.0±0.2	0.6±0.3	1.2	2.3	2.8

■ PART NUMBER CODE

SPHA 252012 - 1R0 M A
1 2 3 4 5

1. Series Name
2. Size Code
3. Inductance(R=Decimal Point) Unit : μH ; 1R0 =1.0uH
4. Inductance tolerance: "M"±20%
5. Soldering : A=Lead Free



■ ELECTRICAL CHARACTERISTICS

1. Part Number and Characteristics Table

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
SPHA252012-R47MA	0.47	20	18	23	4.5	3.8	3.4	3.2
SPHA252012-R68MA	0.68	20	25	30	3.8	3.3	3.0	2.8
SPHA252012-1R0MA	1.0	20	37	45	3.4	3.0	2.6	2.4
SPHA252012-2R2MA	2.2	20	80	95	2.0	1.7	1.4	1.2
SPHA252012-4R7MA	4.7	20	186	210	1.6	1.4	1.2	1.0

Note 1: Referenced ambient temperature 25°C .

Note 2: Test Condition :1MHz ,1.0 Vrms.

Note 3: Isat (Typ): DC current (A) that will cause L0 to drop approximately 30%

Isat (Max): DC current (A) that will cause L0 to drop 30% Max

Irms (Typ): DC current (A) that will cause an approximate ΔT of 40°C

Irms (Max): DC current (A) that will cause an ΔT of 40°C Max

Note 4: Operating temperature range includes self-temperature rise.

Note 5: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

Note 6: Withstand voltage 20V DC.

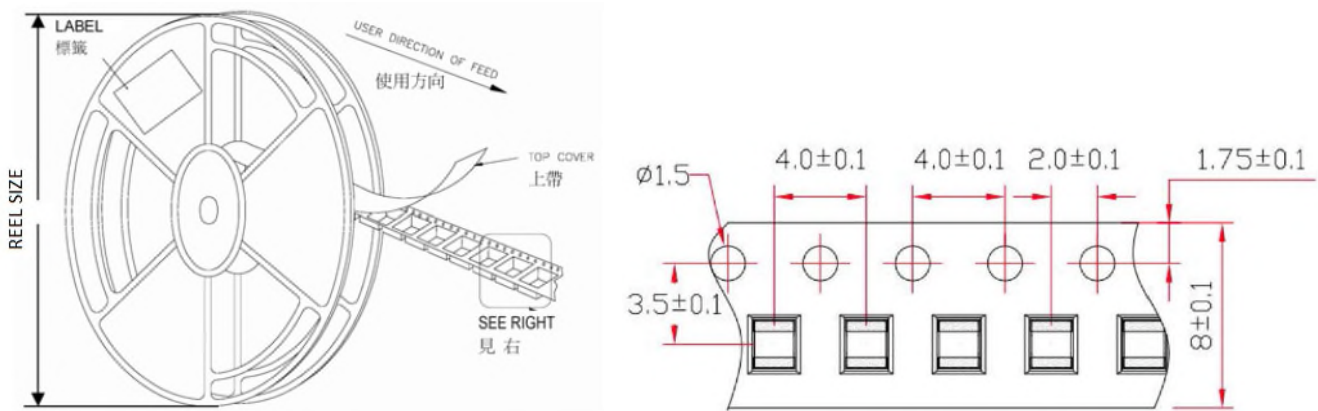
2. Test equipments

- 2.1. L: Agilent E4980 Precision LCR meter (Upgraded version of Agilent HP4284A) with HP42841A Current Source
- 2.2. DCR: Milliohm Meter
- 2.3. Operating temperature: -55°C to 155°C

* Equivalent measurement equipment may be used.



REEL DIMENSIONS AND PACKAGING QUANTITY



Unit: mm

TYPE	W	P	REEL SIZE	PCS / REEL
SPHA252012 series	8	4	178 mm	3000