



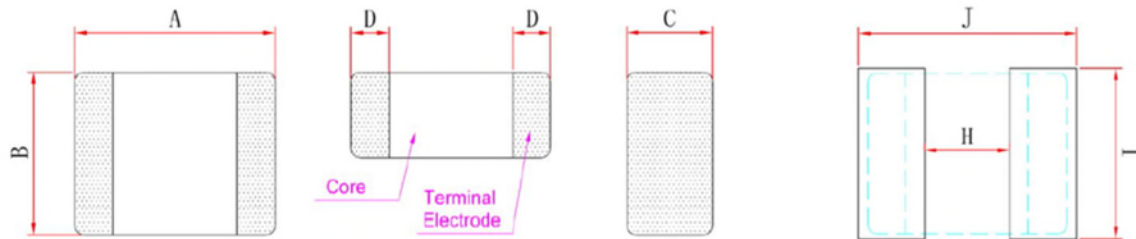
INDEX

SHAPES AND DIMENSIONS.....	1
PART NUMBER CODE	1
ELECTRICAL CHARACTERISTICS.....	2
REEL DIMENSIONS AND PACKAGING QUANTITY	3



**Shielded SMT High Current Power Inductor
AEC-Q200 standard compliance
SPHA2016 series**

■ SHAPES AND DIMENSIONS



Unit: mm

Item	A	B	C	D	H	I	J
SPHA201610	2.0±0.3	1.6±0.3	0.8±0.2	0.5±0.3	0.7	1.8	2.3
SPHA201612	2.0±0.3	1.6±0.3	1.0±0.2	0.5±0.3	0.7	1.8	2.3

■ PART NUMBER CODE

SPHA 201610 - 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.
SPHA201610-R47MA	0.47	20	26	32	3.2	2.7	2.4	2.1

Part No.	Inductance L0 (uH)	Tolerance (±%)	DCR(mΩ)		Isat(A)		Irms(A)	
			Typ.	Max.	Typ.	Max.	Typ.	Max.
SPHA201612-1R0MA	1.0	20	48	58	2.7	2.3	1.9	1.7
SPHA201612-1R5MA	1.5	20	83	98	2.0	1.6	1.4	1.2
SPHA201612-2R2MA	2.2	20	102	125	1.7	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.

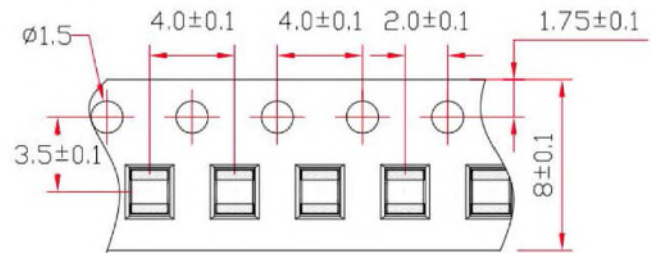
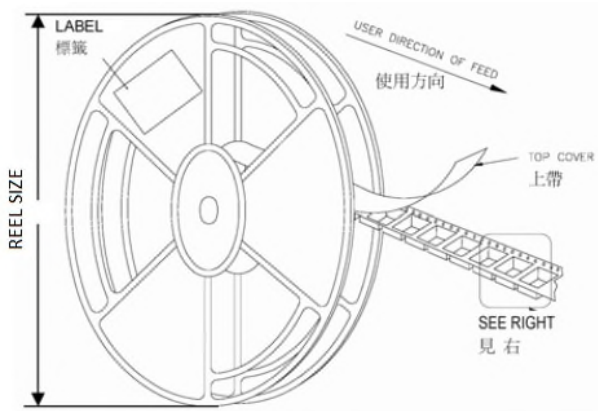
2. Test equipments

- 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
SPHA201610 series	8	4	178 mm	3000
SPHA201612 series	8	4	178 mm	3000