



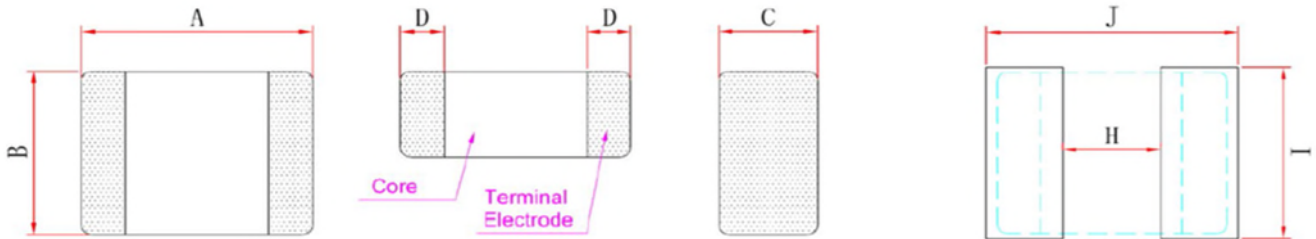
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Shielded SMT High Current Power Inductor AEC-Q200 standard compliance SPHM 3225 series

■ SHAPES AND DIMENSIONS

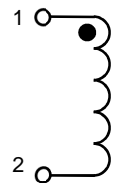


Unit: mm

Item	A	B	C	D	H	I	J
SPHM322512	3.2±0.3	2.5±0.3	1.0±0.2	0.6±0.3	1.7	2.8	3.5
SPHM322520	3.2±0.3	2.5±0.3	1.8±0.2	0.6±0.3	1.7	2.8	3.5

No marking

Schematic :



■ PART NUMBER CODE

SPHM **322512** - **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)	DCR(mΩ)		Isat(A)		Irms(A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SPHM322512-R47MA	0.47	17	22	9.0	8.0	5.8	5.2
SPHM322512-1R0MA	1.0	34	42	6.3	5.8	4.2	3.8
SPHM322512-1R5MA	1.5	40	48	4.8	4.2	3.7	3.2
SPHM322512-2R2MA	2.2	58	66	4.0	3.6	2.9	2.6
SPHM322512-3R3MA	3.3	96	108	3.0	2.6	2.2	2.0
SPHM322512-4R7MA	4.7	140	157	2.8	2.4	1.9	1.6
SPHM322512-6R8MA	6.8	220	276	2.2	1.9	1.5	1.2

Part No.	Inductance L0 (uH)	DCR(mΩ)		Isat(A)		Irms(A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SPHM322520-1R0MA	1.0	22	25	8.0	7.0	4.5	4.0
SPHM322520-1R5MA	1.5	30	35	6.0	5.2	3.5	3.1
SPHM322520-2R2MA	2.2	33	46	5.0	4.3	3.0	2.6
SPHM322520-3R3MA	3.3	50	65	4.2	3.6	2.4	2.1
SPHM322520-4R7MA	4.7	86	98	3.4	2.9	2.2	1.9

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.

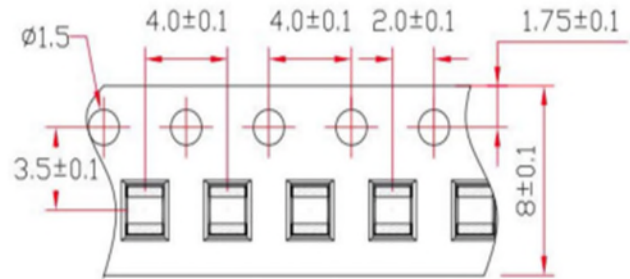
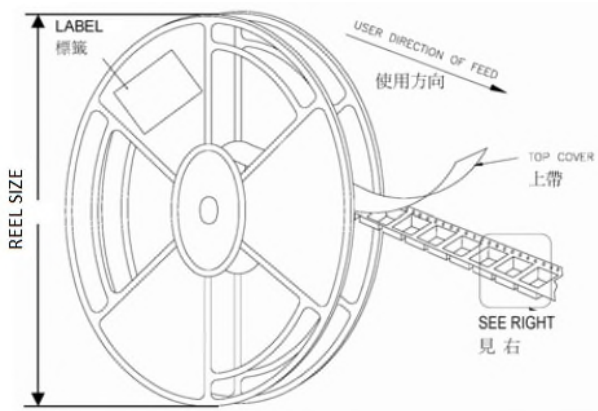
2. Test equipments

- 2.1. L: Agilent E4980 Precision LCR meter (Upgraded version of Agilent HP4284A) with HP42841A Current Source
- 2.2. DCR: Chroma16502 Milliohm Meter
- 2.3. Operating temperature: -55°C to 125°C

* Equivalent measurement equipment may be used.



■ REEL DIMENSIONS AND PACKAGING QUANTITY



Unit: mm

TYPE	W	P	REEL SIZE	PCS / REEL
SPHM322512 series	8	4	178 mm	3000
SPHM322520 series	8	4	178 mm	2000