



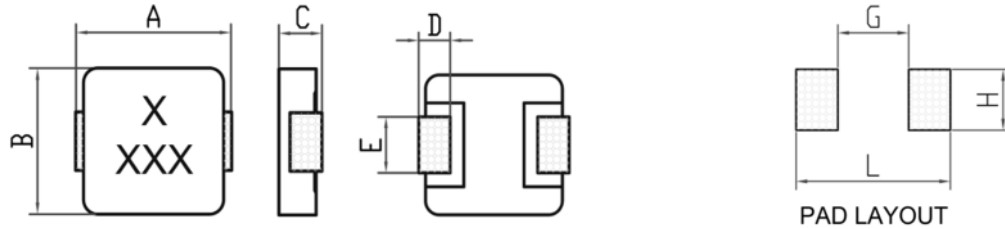
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Shielded SMT High Current Power Inductor
Automotive reliability comply with AEC-Q200 grade 0
SPIA1707 series

■ SHAPES AND DIMENSIONS



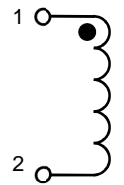
Unit: mm

Item	A Max	B Max	C Max	D	E	G	H	L
SPIA1707	17.3±0.5	17.0±0.3	6.7±0.3	2.10±0.3	12.0±0.3	11.7	12.2	18.0

Marking :

X = A
XXX = Inductance

Schematic :



■ PART NUMBER CODE

SPIA **1707** - **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.
SPIA1707-1R5MA	1.5	1.67	1.9	60.0	50.0	50.0	45.0
SPIA1707-3R3MA	3.3	2.6	3.1	40.0	35.0	37.0	32.0
SPIA1707-4R7MA	4.7	4.5	5.4	35.0	30.0	30.0	27.0
SPIA1707-6R8MA	6.8	6.9	7.5	33.0	25.0	23.0	21.0
SPIA1707-8R2MA	8.2	7.9	8.6	30.0	22.0	21.0	16.0
SPIA1707-100MA	10.0	8.8	10.0	27.0	20.0	19.0	15.0

Note 1: Referenced ambient temperature 25°C .

Note 2: Test Condition :100kHz ,0.25 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.

2. Test equipments

2.1. L: Wayne kerr 3260B LCR meter, Wayne kerr 3265B bias current source.

2.2. DCR: Chroma16502 Milliohm Meter

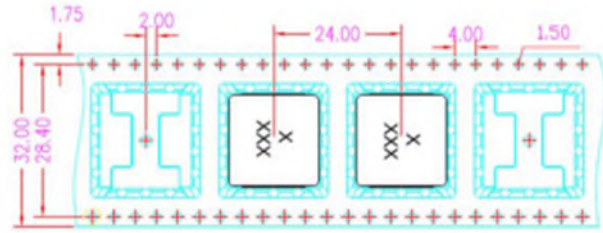
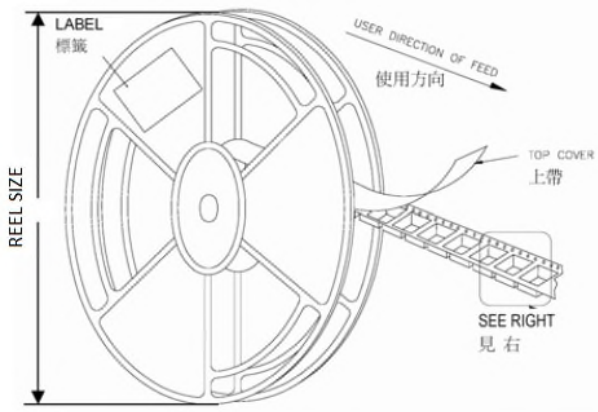
2.3. IWT test: Chroma 19301(A).(Impulse winding test)

2.4. 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
SPIA1707 series	32	24	330 mm (13")	300