



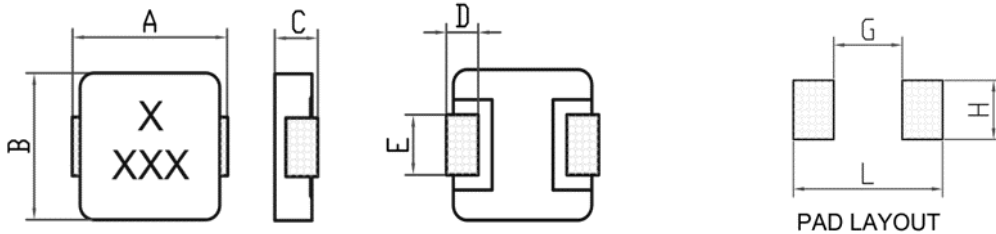
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**Shielded SMT High Current Power Inductor
AEC-Q200 standard compliance
SPIA0603 0604 series**

■ SHAPES AND DIMENSIONS



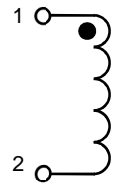
Unit: mm

Item	A	B	C	D	E	G	H	L
SPIA0603	7.10±0.2	6.60±0.2	2.80±0.2	1.60±0.3	3.00±0.5	3.70	3.50	8.00
SPIA0604	7.10±0.2	6.60±0.2	3.80±0.2	1.60±0.3	3.00±0.5	3.70	3.50	8.00

Marking :

X = A
XXX = Inductance

Schematic :



■ PART NUMBER CODE

SPIA 0603 - 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.
SPIA0603-R47MA	0.47	3.7	4.2	24.0	21.0	16.0	15.0
SPIA0603-1R0MA	1.0	7.0	8.0	20.0	17.0	15.0	12.0
SPIA0603-2R2MA	2.2	14.5	16.5	13.0	11.0	10.0	9.0
SPIA0603-3R3MA	3.3	23.5	26.0	12.0	10.0	8.0	7.0
SPIA0603-4R7MA	4.7	30.5	40.0	11.0	9.0	6.5	5.5
SPIA0603-6R8MA	6.8	45.0	48.0	7.0	6.0	5.5	4.5
SPIA0603-100MA	10.0	57.0	80.0	6.0	5.0	5.0	4.0
SPIA0603-150MA	15.0	110.0	118.0	4.5	3.8	3.5	3.3
SPIA0603-220MA	22.0	130.0	145.0	4.0	3.5	3.3	3.0

Part No.	Inductance L0 (uH)	DCR(mΩ)		Isat(A)		Irms(A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SPIA0604-2R2MA	2.2	12.0	14.5	16.0	13.0	11.0	9.0
SPIA0604-4R7MA	4.7	23.5	30.8	11.0	10.0	7.5	6.5
SPIA0604-100MA	10.0	52.5	63.0	5.0	4.5	4.5	4.0
SPIA0604-150MA	15.0	74.0	87.0	4.5	3.8	3.8	3.6
SPIA0604-220MA	22.0	146.5	170.0	4.0	3.5	3.0	2.7
SPIA0604-330MA	33.0	165.0	200.0	3.6	3.0	2.8	2.6

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.

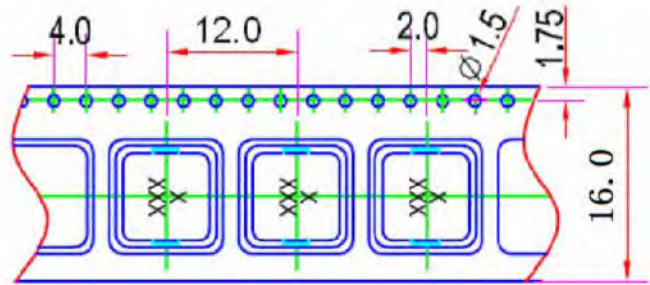
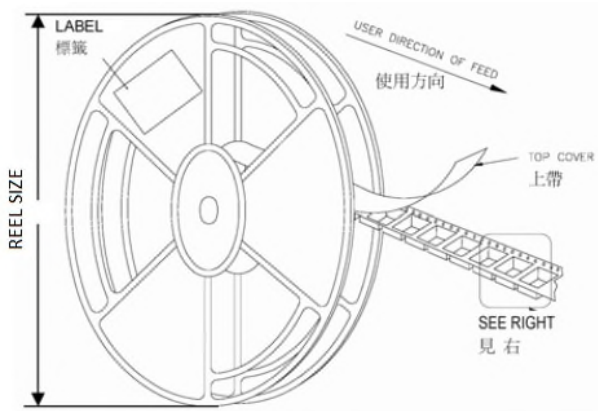
2. Test equipments

- 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
SPIA0603 series	16	12	330 mm (13")	1500
SPIA0604 series	16	12	330 mm (13")	1000