



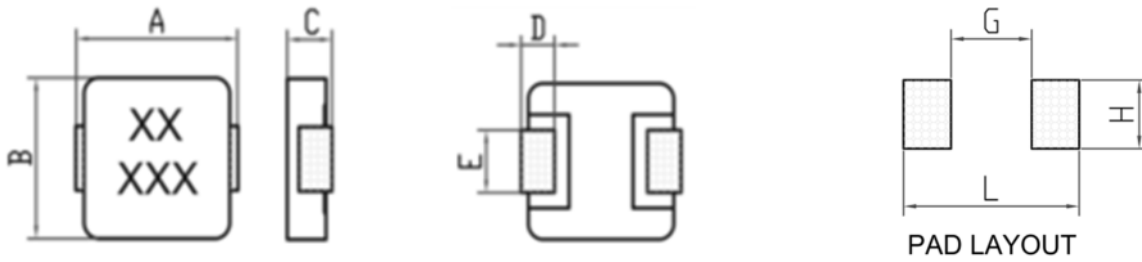
# INDEX

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



**Shielded SMT High Current Power Inductor**  
Automotive reliability comply with AEC-Q200 grade 1  
**SPIM1205\_12654B series**

**■ SHAPES AND DIMENSIONS**



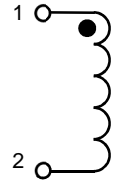
Unit: mm

Item	A	B	C	D	E	G	H	L
SPIM1205B	13.4±0.5	12.6±0.3	4.8±0.2	2.3±0.3	3.0±0.5	8.0	5.0	14.5
SPIM1265B	13.4±0.5	12.6±0.3	6.3±0.2	2.3±0.3	3.0±0.5	8.0	5.0	14.5

Marking :

XX = MB  
XXX = Inductance

Schematic :



**■ PART NUMBER CODE**

**SPIM   1205   B   -   1R0   M   A**  
**1        2        3        4        5        6**

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



## ■ ELECTRICAL CHARACTERISTICS

### 1. Part Number and Characteristics Table

#### SPIM1205B series

Part No.	Inductance L0 ( uH )	DCR(mΩ)		Isat(A)		Irms(A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SPIM1205B-R22MA	0.22	0.62	0.8	95.0	85.0	48.0	42.0
SPIM1205B-R47MA	0.47	1.14	1.5	84.0	75.0	38.0	35.0
SPIM1205B-R68MA	0.68	1.33	1.7	70.0	60.0	36.0	33.0
SPIM1205B-1R0MA	1.0	2.2	2.5	65.0	56.0	30.0	27.0
SPIM1205B-2R2MA	2.2	4.4	5.5	37.0	30.0	21.0	19.0
SPIM1205B-4R7MA	4.7	9.72	12.0	29.0	25.0	15.0	13.0
SPIM1205B-100MA	10.0	23.5	28.0	20.5	17.5	9.0	8.0
SPIM1205B-330MA	33.0	73.9	78.0	11.5	10.0	5.2	4.0

#### SPIM1265B series

Part No.	Inductance L0 ( uH )	DCR(mΩ)		Isat(A)		Irms(A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SPIM1265B-R33MA	0.33	0.65	0.8	95.0	85.0	48.0	45.0
SPIM1265B-3R3MA	3.3	4.3	5.2	44.0	38.0	20.0	17.0
SPIM1265B-4R7MA	4.7	6.4	8.0	40.0	35.0	18.0	15.0
SPIM1265B-470MA	47.0	73.0	90.0	9.0	8.0	5.5	4.5

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.

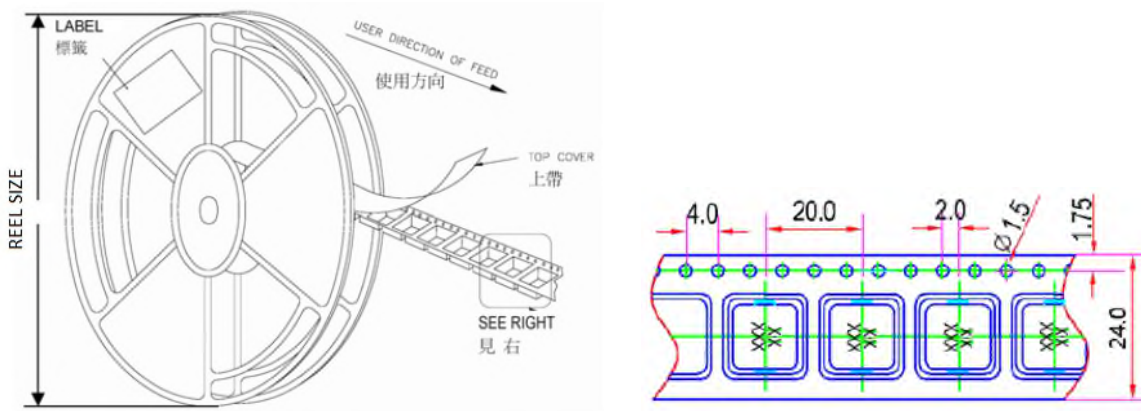
2.2. DCR: Chroma16502 Milliohm Meter

2.3. 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
<b>SPIM1205B series</b>	24	20	330 mm (13")	500
<b>SPIM1265B series</b>	24	20	330 mm (13")	400