



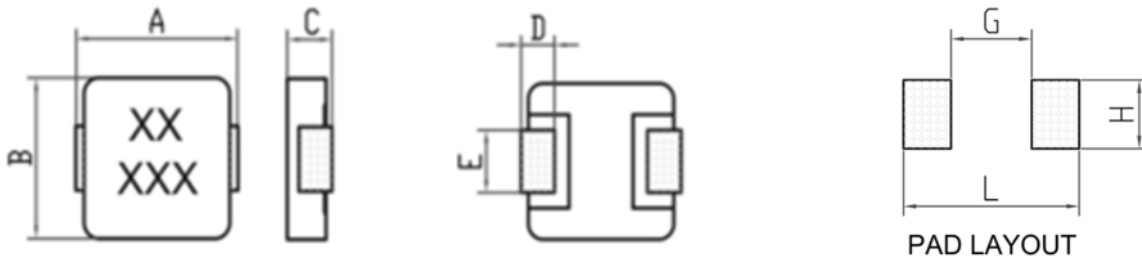
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**Shielded SMT High Current Power Inductor**  
Automotive reliability comply with AEC-Q200 grade 1  
**SPIM1707B series**

**■ SHAPES AND DIMENSIONS**



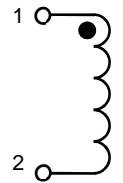
Unit: mm

Item	A	B	C	D	E	G	H	L
SPIM1707B	17.3±0.5	17.0±0.3	6.70±0.3	2.10±0.3	12.0±0.3	11.7	12.2	18.0

Marking :

XX = MB  
XXX = Inductance

Schematic :



**■ PART NUMBER CODE**

**SPIM   1707   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 :  $\mu\text{H}$  ; 1R0 =1.0 $\mu\text{H}$
5. Inductance tolerance: "M"±20%
6. 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.
SPIM1707B-1R5MA	1.5	1.77	1.96	68.0	60.0	48.0	40.0
SPIM1707B-3R3MA	3.3	3.0	3.88	60.0	54.0	36.0	23.5
SPIM1707B-4R7MA	4.7	4.2	5.11	50.0	41.0	33.0	20.0

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.

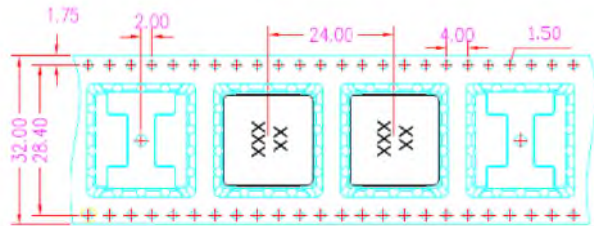
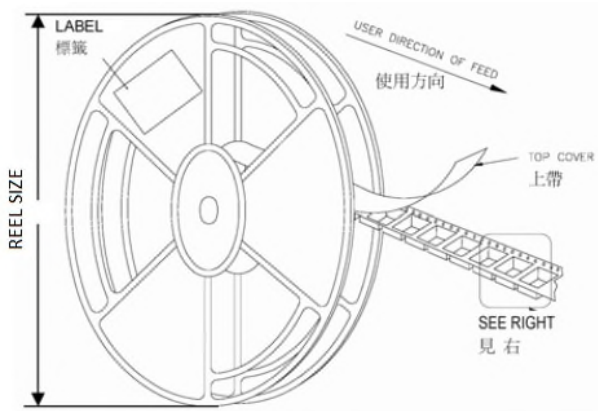
2.2. DCR: Chroma16502 Milliohm Meter

2.3. 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>SPIM1707B series</b>	32	24	330 mm (13")	300