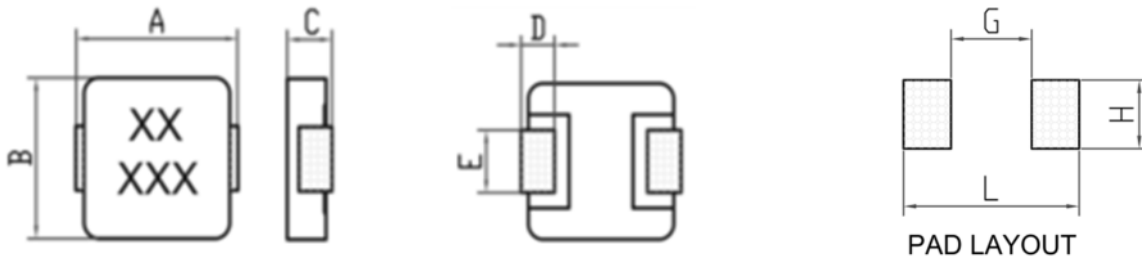




**Shielded SMT High Current Power Inductor**  
Automotive reliability comply with AEC-Q200 grade 1  
**SPIM1205\_12654F series**

■ SHAPES AND DIMENSIONS



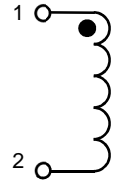
Unit: mm

Item	A	B	C	D	E	G	H	L
SPIM1205F	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
SPIM1265F	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 = MF  
XXX = Inductance

Schematic :



■ PART NUMBER CODE

**SPIM   1205   F   -   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

#### SPIM1205F series

Part No.	Inductance L0 ( uH )	DCR(mΩ)		Isat(A)		Irms(A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SPIM1205F-R68MA	0.68	1.5	1.8	52.0	45.0	34.0	30.0
SPIM1205F-8R2MA	8.2	17.8	22.5	15.0	13.0	10.0	8.5
SPIM1205F-100MA	10.0	23.3	28.0	14.0	12.5	9.5	8.0
SPIM1205F-220MA	22.0	41.5	45.0	10.5	9.0	6.5	5.5
SPIM1205F-470MA	47.0	82.7	96.0	6.0	5.0	4.0	3.5

#### SPIM1265F series

Part No.	Inductance L0 ( uH )	DCR(mΩ)		Isat(A)		Irms(A)	
		Typ.	Max.	Typ.	Max.	Typ.	Max.
SPIM1265F-1R5MA	1.5	2.6	3.0	45.0	39.0	30.0	27.0
SPIM1265F-4R7MA	4.7	6.0	7.7	28.0	24.0	20.0	17.0
SPIM1265F-100MA	10.0	15.8	18.0	17.0	15.0	11.0	9.5
SPIM1265F-150MA	22.0	23.2	29.0	12.0	10.5	9.0	8.0

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.

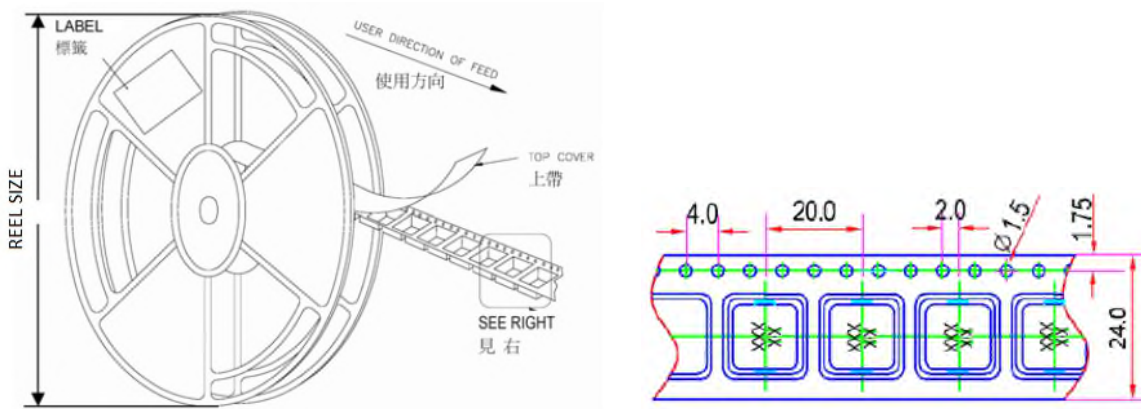
2.2. DCR: Chroma16502 Milliohm Meter

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>SPIM1205F series</b>	24	20	330 mm (13")	500
<b>SPIM1265F series</b>	24	20	330 mm (13")	400