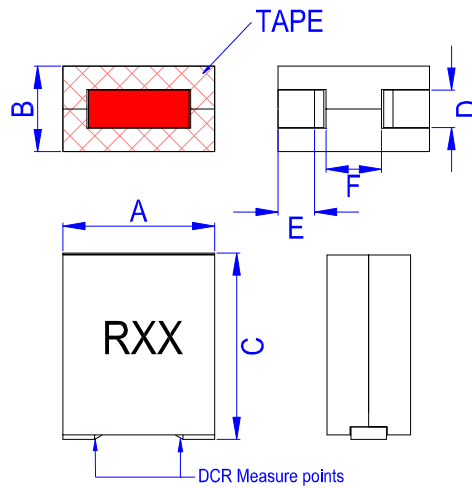


SMT Power Inductor SIE2100612-S1 Series

■ SHAPES AND DIMENSIONS

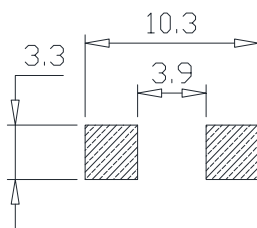


Unit: mm

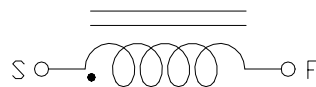
P/N	A max	B max	C max	D	E	F
SIE2100612-S1	10.0	6.2/ 6.0	12.1	2.4 ± 0.3	3.0 ± 0.4	3.3 ref.

Marking : XXX = Inductance

Recommend PAD Layout



Equivalent circuit





■ PART NUMBER CODE

<u>SIE2</u>	<u>100612</u>	-	<u>R10</u>	<u>L</u>	<u>A</u>	-	<u>S1</u>
1	2		3	4	5		6

1. Series Name
2. Size Code
3. Inductance(R=Decimal Point) Unit : μH ; R10 =0.10uH
4. Inductance tolerance: "L" $\pm 15\%$; "M" $\pm 20\%$.
5. Soldering : A=Lead Free
6. Special code



■ ELECTRICAL CHARACTERISTICS

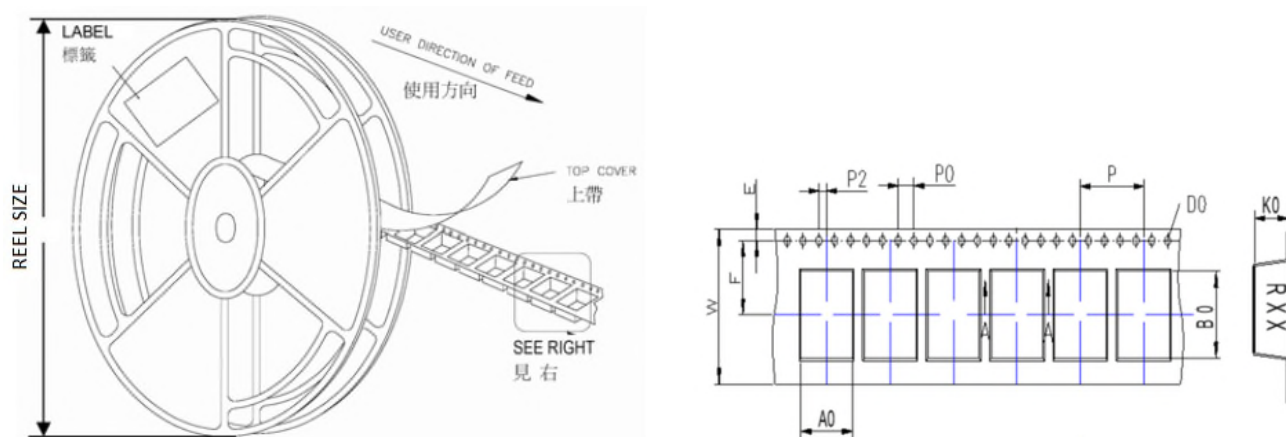
1. Part Number and Characteristics Table

Part number	Initial Inductance (nH)	Tolerance (±%)	DCR (mΩ)	1-Saturation Current @25°C (Amps)(typ)	2-Saturation Current @100°C (Amps)(typ)	Temperature Rise Current (Amps)	B mm
SIE2100612-R07LA-S1	70	15	0.125±10%	170(typ)	155(typ)	84(typ)	6.2 Max
SIE2100612-R08LA-S1	80	15	0.125±10%	150(typ)	130(typ)	84(typ)	6.2 Max
SIE2100612-R09LA-S1	90	15	0.125±10%	131(typ)	110(typ)	84(typ)	6.0 Max
SIE2100612-R10LA-S1	100	15	0.125±10%	125(typ)	105(typ)	84(typ)	6.0 Max
SIE2100612-R12LA-S1	120	15	0.125±10%	105(typ)	88(typ)	84(typ)	6.0 Max
SIE2100612-R15LA-S1	150	15	0.125±10%	88(typ)	83(typ)	84(typ)	6.0 Max
SIE2100612-R22LA-S1	220	15	0.125±10%	60(typ)	50(typ)	84(typ)	6.0 Max
SIE2100612-R30LA-S1	300	15	0.125±10%	41(typ)	35(typ)	84(typ)	6.0 Max
SIE2100612-R33LA-S1	330	15	0.125±10%	40(typ)	32(typ)	84(typ)	6.0 Max
SIE2100612-R47MA-S1	470	20	0.125±10%	27(typ)	22(typ)	84(typ)	6.0 Max
SIE2100612-R58MA-S1	580	20	0.125±10%	18(typ)	15(typ)	84(typ)	6.0 Max

Note:

- Initial Inductance: Testing at 100 KHz / 1.0 Vrms.
- Saturation Current: DC current that will cause initial Inductance to drop approximately 20%.
- Temperature Rise Current: DC current that will cause an approximate ΔT of 40°C.
- All test data is referenced to 25°C ambient.
- Operating temperature : -40~+125°C (Including self - temperature rise).

■ REEL DIMENSIONS AND PACKAGING QUANTITY



Unit: mm

P/N	W	P	REEL SIZE	PCS / REEL
SIE2100612-S1	24	16	330 mm (13")	300



■ NOTE

1. Storage condition:

To maintain the solderability of terminal electrodes:

- 1.1. Temperature and humidity conditions: 5~35°C and 35~65%RH.
- 1.2. Storage life: 12 months Max. If product is preserved for more than 1 year, the solderability of their terminals may be deteriorated.
- 1.3. The packaging material should be kept where no chlorine or corrosive gas environment. (example: salt, sulfur, acid, etc ..)

2. Transportation

- 2.1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- 2.2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
- 2.3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

3. Application

The products listed on this datasheet are intended for use in general electronic equipment under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property. ETC shall not be held liable for any malfunction or breakdown caused by using product in the condition which is inconsistent with that recommended by ETC.

(1)Military equipment. (2)Medical equipment. (3)Aerospace equipment. (4) Other applications that are not considered general-purpose applications.