



磁立方

# SPECIFICATION FOR APPROVAL

**CUSTOMER** : \_\_\_\_\_

**CUSTOMER P/N** : \_\_\_\_\_

**DESCRIPTION** : SMD Inductor

**Supplier P/N** : SER3219T-3R3M

**REVISION NO.** : V1.0

**DATE** : 2022-Sep-06

**NOTES** : STANDARD

Supplier DOCUMENTED	
APPROVED	David
CHECKED	Zhao yun
PREPARED	You yuan

CUSTOMER APPROVAL	

© Company seals

Version:1.0	CUSTOMER P/N		PRODUCT	SMD Inductor
	ITEM P/N	SER3219T-3R3M	DATE	2022-Sep-06



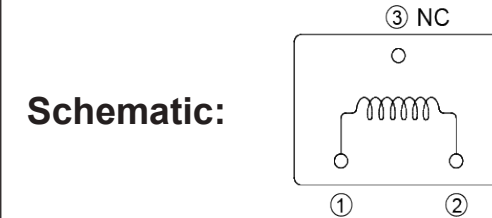
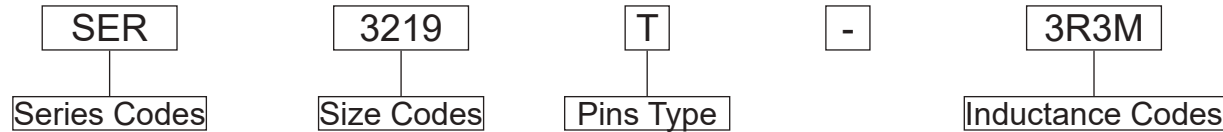
深圳市磁立方科技有限公司  
ShenZhen Magnetic Cube Technology Co., LTD.

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ADD:F2, Building C, Furong Road No.8 , Tantou, Songgang, Baoan District, Shenzhen

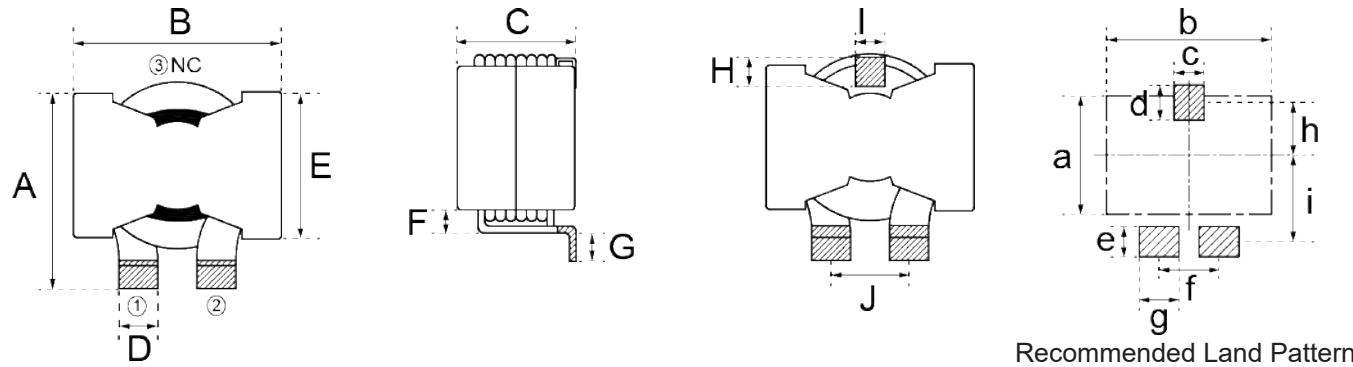


# MAIN SPECIFICATION

## EXPLANATION OF PART NUMBERS



## PRODUCT DIMENSIONS (mm)




A	34.5Max	a	23.5
B	32.0±1.0	b	33.0
C	18.5±0.5	c	6.0
D	6.0±0.3	d	7.0
E	22.5±1.0	e	6.0
F	4.0Max	f	12.0
G	3.8Min	g	8.0
H	4.5	h	10.5
I	4.5	i	17.25
J	12.0±0.5		

## ELECTRICAL CHARACTERISTICS

ITEM P/N	@ 25 ± 5°C Ambient Temperature			DCR mΩ @ 25°C Typica	DCR mΩ @ 25°C Max
	INDUCTANCE 100KHz, 0.1V	Typical Heat Rating DC Current (A) (I <sub>dc</sub> )	Typical Saturation DC Current (A) (I <sub>sat</sub> )		
	Lo (μH)				
SER3219T-3R3M	3.3±20%	55.0	80.0	1.00	1.20

- ⊙ All data is tested based on 25°C ambient temperature.
- ⊙ Inductance measure condition at 100kHz,0.1V.
- ⊙ Saturation current:the actual value of DC current when the inductance decrease 20% of its initial value.
- ⊙ Temperature rise current:the actual value of DC current when the temperature rise is ΔT40°C (Ta=25°C).
- ⊙ Special remind:Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.

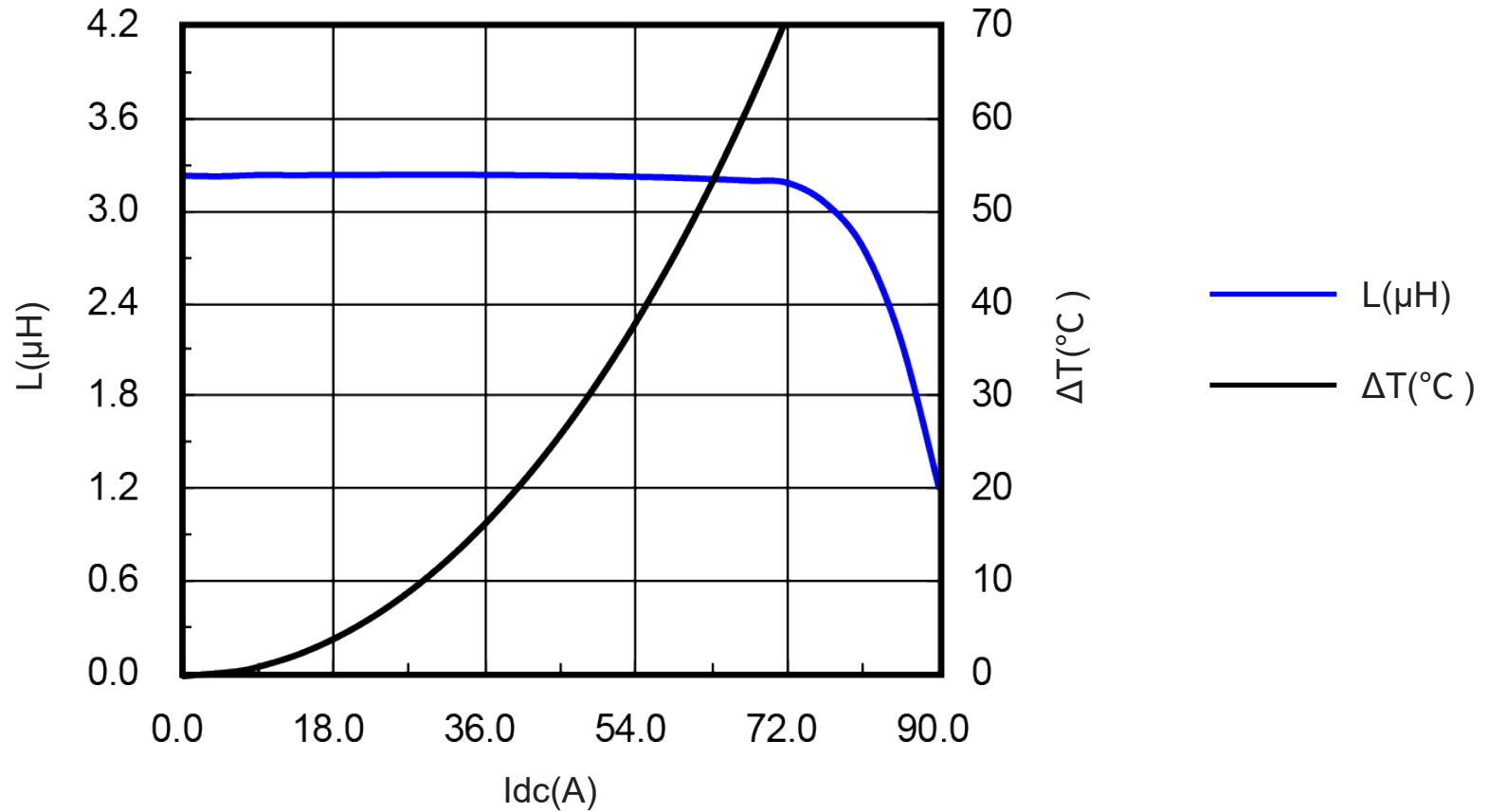
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# CHARACTERISTICS

Saturation Current vs Temperature Rise Current Curve:



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# CHARACTERISTICS

## RECOMMENDED SOLDERING TEMP. GRAPH



A	B	C	D	E
260°C	230°C	8-10Sec	150°C	60~240Sec

## MECHANICAL RELIABILITY

TEST	Specification & Requirement	Method Used
Solderability	The surface of terminal/pin tested shall be covered with new solder by 95%	Solder heat proof.
		Preheating:180 ±10°C 90 seconds
		Soldering:255 ±5°C for 3 ±1 sec
Shock	Inductance change within ± 5% Without mechanical damage	Drop down with 981m/s2 (100G) shock
		Attitude upon a rubber block method shock testing machinem, 3 tests.
Vibration	Inductance change within ± 5% Without mechanical damage	Vibration frequency:10Hz to 55Hz to 10Hz, 60 seconds cycle.
		Vibration time: 2 hours

## ENDURANCE RELIABILITY

TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-25°C ,(30 mins) -> room temp. (5 mins) ->125°C , (30 mins) -> room temp. (5 mins)100 cycles
Heat Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @ 85°C ambient Duration: 1000 hrs
Humidity Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @ 60°C ambient Humidity: 90~95% Duration: 1000 hrs
Low Temp. Storing	Inductance change within ± 5% Without mechanical damage	Storing Temp -25 ±2 °C for total 1,000 +4/-0 hours
High Temp. Storing	Inductance change within ± 5% Without mechanical damage	Storing Temp 125±2 °C for total 1,000 +4/-0 hours

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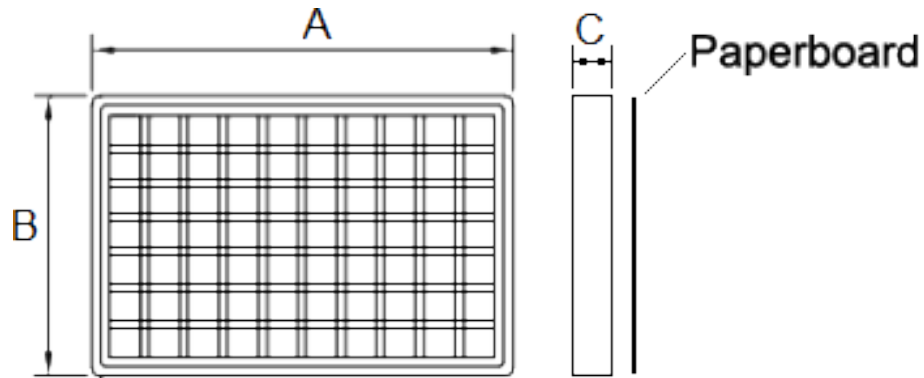
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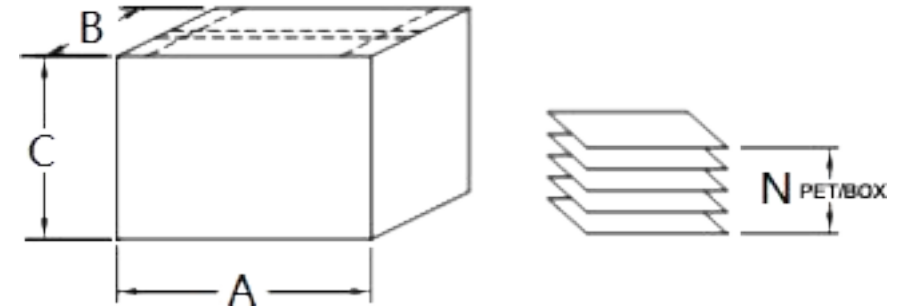
# PACKING INFORMATION

## Packing Information:(unit: mm)

1.PET plate specification: 245\*195\*21mm,35pcs/PET Box



2.Outer box specification: 275\*232\*261mm,  
9 PET plate in one box



Plastic Plate(mm)	Outer Box(mm)
9pcs/PET Box	81pcs/Box

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