SPECIFICATION FOR APPROVAL

Customer：	深圳市海藍芯科技有限公司
Customer P/N:	
Drawing No：	
Quantity：	**1 Pcs. Date： 2022/07/18**
Chilisin P/N：	**LVS404018-4R7M-AU**

Automotive Grade Inductor

Halogen Free
RoHS Compliant
REACH Compliant
Lead Free Solders
AEC-Q200

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Applied by	Checked by	Approved by
KOE020 鄒誼凱	**R024 郭俊良**	**R028 葉信賢**

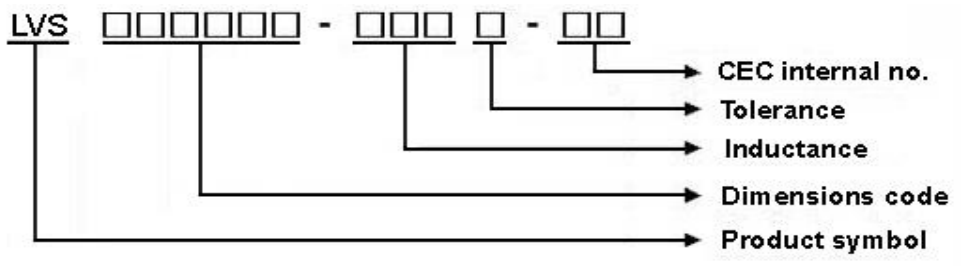
LVS404018 Series Specification

AEC-Q200

1 Scope:

This specification applies to Wire Wound Power Inductors

2 Part Numbering:



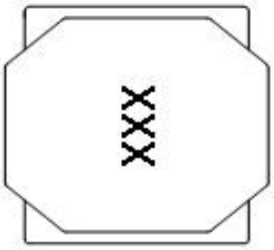
3 Rating:

Operating Temperature: -40℃~125℃(Including self - temperature rise)

Storage Temperature: -40℃~105℃

(The storage temperature range is for after the assembly)

4 Marking:



Ex : LVS404018-2R2T-AU

Marking : 2R2

Marking color : Black

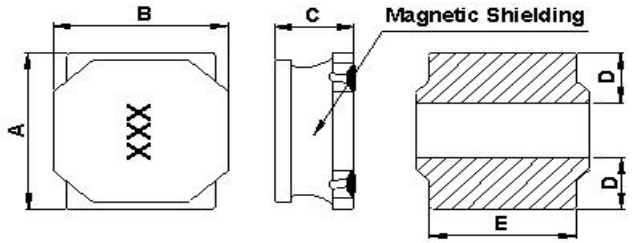
5 Standard Testing Condition

	Unless otherwise specified	In case of doubt
Temperature	Ordinary Temperature(15 to 35℃)	20 to 30℃
Humidity	Ordinary Humidity(25 to 85% RH)	50 to 80 %RH

LVS404018 Series Specification

AEC-Q200

6 Configuration and Dimensions:



Dimensions in mm

TYPE	LVS404018
A	4.0±0.2
B	4.0±0.2
C	$1.8^{+0.2}_{-0.3}$
D	1.3±0.3
E	3.6 typ.

7 Electrical Characteristics:

Part No.	Inductance (uH)	Test Freq.	RDC (mΩ)±20%	Isat(A) Typ.(Max)	Irms(A) Typ.(Max)	Tolerance (±%)	Marking
LVS404018-1R0□-AU	1	100kHz,1V	32	4.10(3.60)	2.80(2.50)	20,30	1R0
LVS404018-1R5□-AU	1.5	100kHz,1V	40	3.30(2.90)	2.60(2.30)	20,30	1R5
LVS404018-1R8□-AU	1.8	100kHz,1V	55	2.80(2.50)	2.50(2.20)	20,30	1R8
LVS404018-2R2□-AU	2.2	100kHz,1V	60	2.80(2.50)	2.50(2.20)	20,30	2R2
LVS404018-2R3□-AU	2.3	100kHz,1V	60	2.80(2.50)	2.50(2.20)	20,30	2R3
LVS404018-3R3□-AU	3.3	100kHz,1V	70	2.20(1.90)	2.10(1.80)	20,30	3R3
LVS404018-3R6□-AU	3.6	100kHz,1V	75	2.10(1.80)	1.90(1.70)	20,30	3R6
LVS404018-3R9□-AU	3.9	100kHz,1V	75	2.10(1.80)	1.90(1.70)	20,30	3R9
LVS404018-4R7□-AU	4.7	100kHz,1V	90	2.00(1.80)	1.70(1.50)	20,30	4R7
LVS404018-6R8□-AU	6.8	100kHz,1V	110	1.60(1.40)	1.50(1.30)	20,30	6R8
LVS404018-8R2□-AU	8.2	100kHz,1V	155	1.50(1.30)	1.30(1.10)	20,30	8R2
LVS404018-100□-AU	10	100kHz,1V	170	1.40(1.20)	1.20(1.00)	20,30	100
LVS404018-150□-AU	15	100kHz,1V	250	1.00(0.90)	1.00(0.90)	20,30	150
LVS404018-220□-AU	22	100kHz,1V	350	0.90(0.81)	0.85(0.76)	20,30	220
LVS404018-330□-AU	33	100kHz,1V	530	0.80(0.72)	0.70(0.63)	20,30	330
LVS404018-470□-AU	47	100kHz,1V	720	0.70(0.63)	0.56(0.50)	20,30	470
LVS404018-680□-AU	68	100kHz,1V	1000	0.56(0.50)	0.45(0.40)	20,30	680
LVS404018-101□-AU	100	100kHz,1V	1500	0.46(0.41)	0.38(0.34)	20,30	101
LVS404018-121□-AU	120	100kHz,1V	1600	0.38(0.34)	0.36(0.32)	20,30	121
LVS404018-151□-AU	150	100kHz,1V	2500	0.35(0.31)	0.30(0.27)	20,30	151
LVS404018-221□-AU	220	100kHz,1V	4000	0.28(0.25)	0.23(0.20)	20,30	221

NOTE: □-tolerance M=±20% / T=±30%

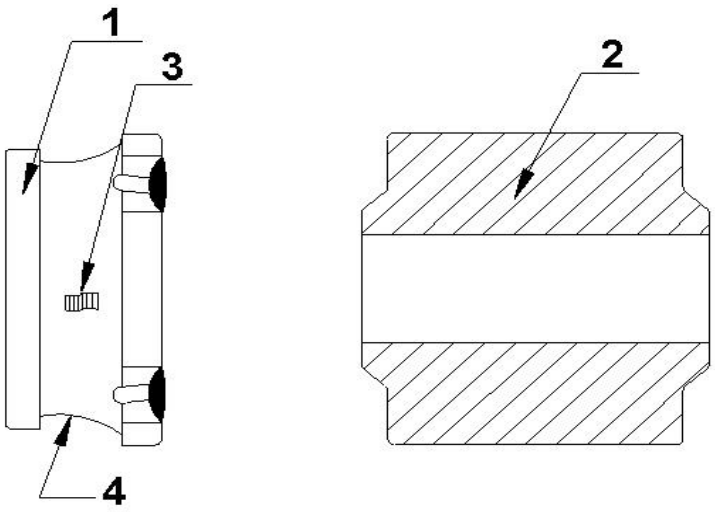
1.Operating temperature range -40℃~125℃(Including self - temperature rise)

2.Isat for Inductance drop 30% from its value without current.

3.Irms for a 40℃ temperature rise from 25℃ ambient.

8 LVS404018 Series

8.1 Construction:



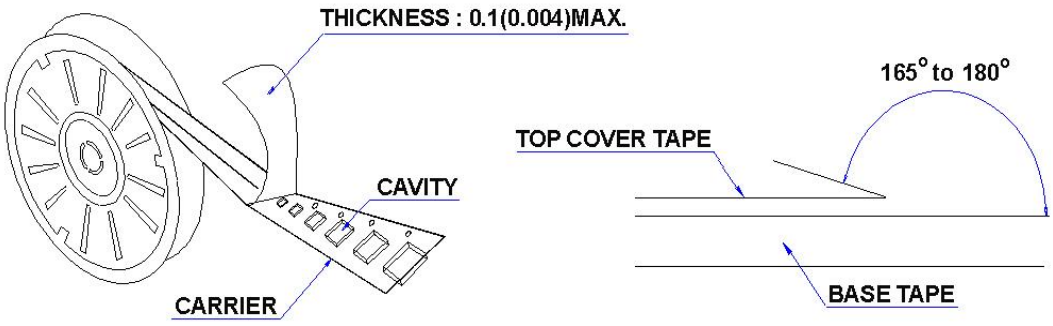
8.2 Material List:

No	Part	Material
1	Core	Ferrite
2	Terminal	Ag/Cu/Ni/Sn
3	Wire	Grade 180
4	Epoxy	Magnetic powder resin

9 Packaging:

9.1 Packaging -Cover Tape

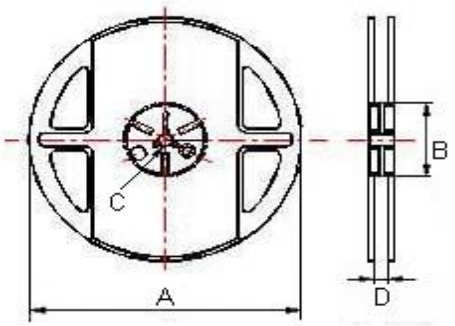
The force for tearing off cover tape is 10 to 130 grams in the arrow direction.



9.2 Packaging Quantity

TYPE	PCS/REEL
LVS404018	800

9.3 Reel Dimensions



Dimensions in mm

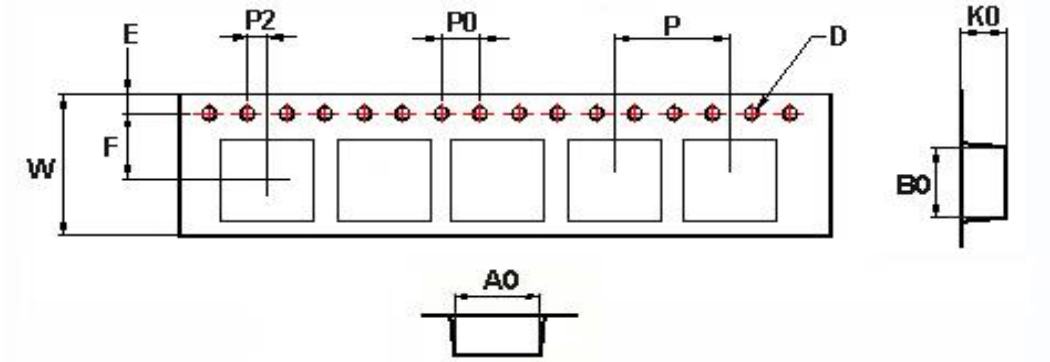
TYPE	A	B	C	D
LVS404018	178	60	13	13.2

LVS404018 Series Specification

AEC-Q200

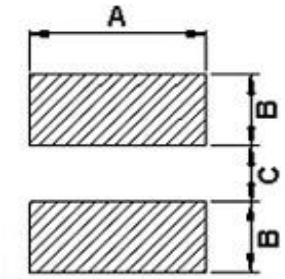
9 Packaging:

9.4 Tape Dimensions in mm



TYPE	A0	B0	K0	D	E	F	W	P	P0	P2
LVS404018	4.25	4.25	2.1	1.55	1.75	5.5	12	8	4	2

10 Recommended Land Pattern:



Dimensions in mm

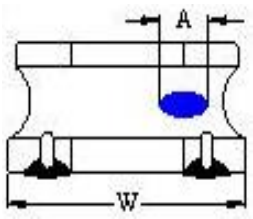
TYPE	A	B	C
LVS404018	3.7	1.5	1.2

11 Note:

1. Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.
2. Do not knock nor drop.
3. All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose,under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.
4. Please keep the distance between transformer/coil and other components (refer to the standard IEC 950)
5. The moisture sensitivity level (MSL) of products is classified as level 1.

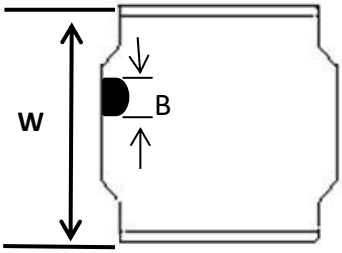
11 Note:

6. Void Appearance tolerance Limit



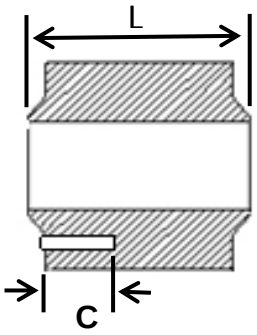
Exposed wire tolerance limit of coating resin part on product side.
The unilateral should be no more than two holes.

A≦ W/2	GOOD
A> W/2	NG



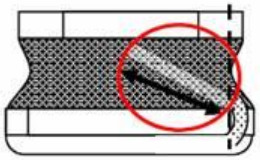
The appearance standard pf the chipping size in top side.

B≦ W/8	GOOD
B> W/8	NG



Electrode appearance criterion for exposed wire.

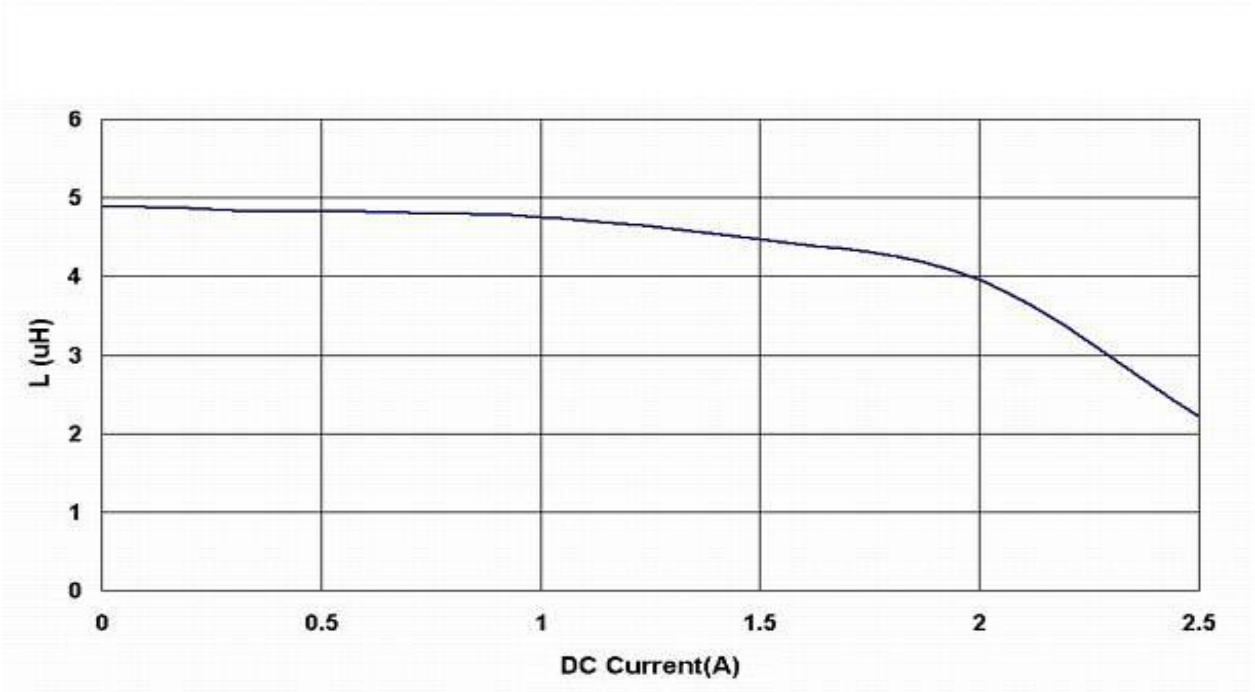
C≦ L/4	GOOD
C> L/4	NG

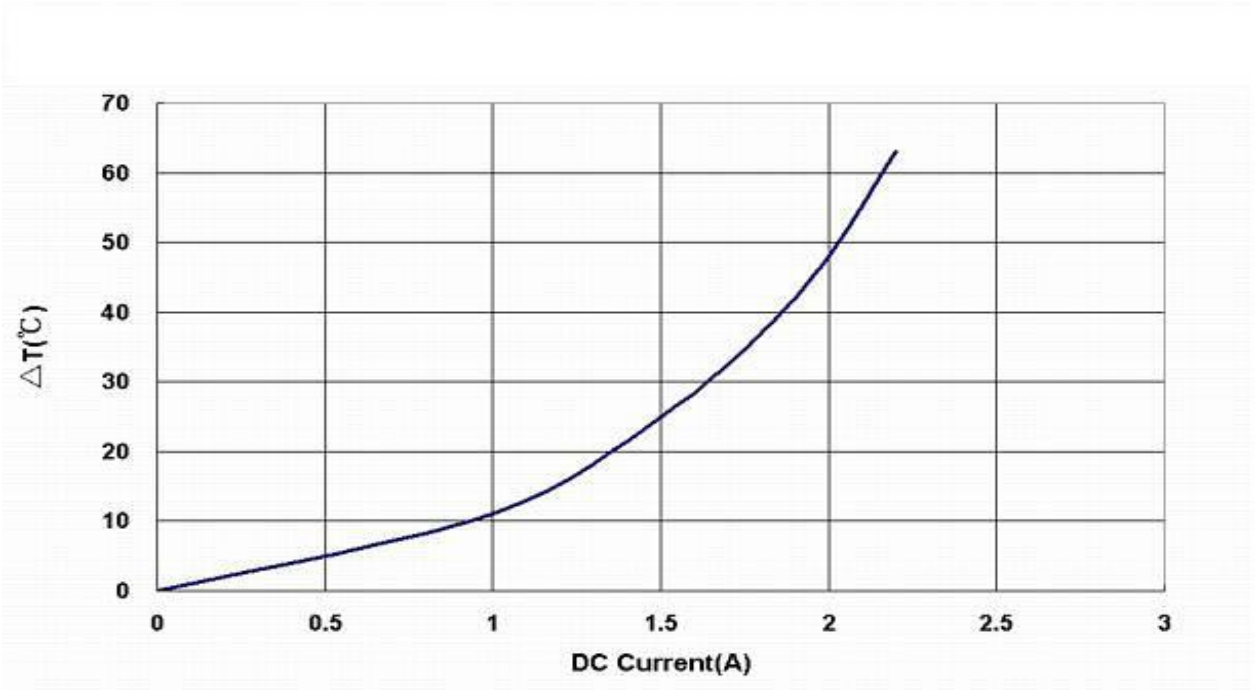


External appearance criterion for exposed wire

Exposed end of the winding wire at the side should be acceptable.

12 Graph: LVS404018-4R7M-AU





Temperature test conditions:

1. Start as the atmosphere temp. @25℃.
2. Take the reading once it becomes stable.
3. Need to wait 90Sec at least, then change to the next applied current value.