



RoHS & Halogen Free & REACH Compliance.

SPECIFICATION FOR APPROVAL

Customer : _____ **各廠家**

Customer P/N: _____

Drawing No : _____

Quantity : 0 **Pcs. Date :** 2018/10/24

Chilisin P/N : _____ **LVH252A12-1R0M-N**

**SPECIFICATION
ACCEPTED BY:**

| | |
|--------------------------------|--|
| COMPONENT ENGINEER | |
| ELECTRICAL ENGINEER | |
| MECHANICAL ENGINEER | |
| APPROVED | |
| REJECTED | |

奇力新電子股份有限公司
Chilisin Electronics Corp
No. 29, Alley 301, Tehhsin Rd.,
Hukou, Hsinchu 303, Taiwan
TEL : +886-3- 599-2646
FAX : +886-3- 599-9176
E-mail : sales@chilisin.com
[http : //www.chilisin.com](http://www.chilisin.com)

東莞奇力新電子(東莞廠)有限公司
Chilisin Electronics (Dongguan) Co., Ltd.
No. 78, Puxing Rd., Yuliangwei Administration Area,
Qingxi Town, Dongguan City, Guangdong, China
TEL : +86-769-8773-0251~3
FAX : +86-769-8773-0232
E-mail : cect@chilisin.com

奇力新電子(越南廠)有限公司
Chilisin Electronics (Vietnam) Limited
No 143 - 145, Road No 10, VSIP Hai Phong,
Lap Le Commune, Thuy Nguyen Dist,
Haiphong City, Vietnam
Tel : 84-316 255 688 Fax : 84-316 255
689
E-mail : sales@chilisin.com

奇力新電子(湖南廠)有限公司
HuNan Chilisin Electronics Technology Co., Ltd
No. 8, Shaziao Liangshuijing Town, Yuanling
County, Huaihua City, Hunan Province 419601,
China
Tel : 86-745-867-5882
E-mail : cect@chilisin.com

Drawn by
陳瑞揚 ryan.chen

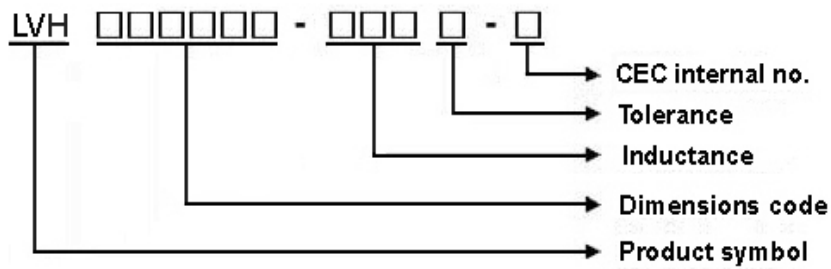
Checked by
溫美玲 ling

Approved by
陳瑞揚 ryan.chen

LVH252A12 Series Specification

1 Scope: This specification applies to Wire Wound Power Inductors

2 Part Numbering:

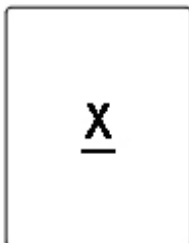


3 Rating:

Operating Temperature: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (Including self - temperature rise)

Storage Temperature: $20^{\circ}\text{C} \sim 25^{\circ}\text{C}$ R.H. 65% (In Tape & Reel Condition)

4 Marking:



Ex : LVH252A12-1R0M-N

Marking : A

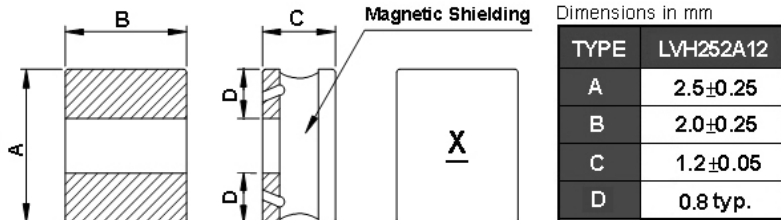
Marking color : Black

5 Standard Testing Condition

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

LVH252A12 Series Specification

6 Configuration and Dimensions:



7 Electrical Characteristics:

| Part No. | Inductance (uH) | Test Freq. | RDC (Ω)±30% | Isat(mA) Typ.(Max) | Irms(mA) Typ.(Max) | Tolerance (±%) | Marking |
|------------------|-----------------|------------|-------------|--------------------|--------------------|----------------|---------|
| LVH252A12-R24□-N | 0.24 | 1MHz,200mV | 0.021 | 4700(4200) | 3800(3200) | 20,30 | E |
| LVH252A12-R33□-N | 0.33 | 1MHz,200mV | 0.027 | 4200(3700) | 3000(2500) | 20,30 | G |
| LVH252A12-R47□-N | 0.47 | 1MHz,200mV | 0.027 | 3600(3400) | 3000(2500) | 20,30 | J |
| LVH252A12-R50□-N | 0.5 | 1MHz,200mV | 0.027 | 3600(3400) | 3000(2500) | 20,30 | D |
| LVH252A12-R68□-N | 0.68 | 1MHz,200mV | 0.036 | 2900(2600) | 2800(2300) | 20,30 | H |
| LVH252A12-1R0□-N | 1 | 1MHz,200mV | 0.037 | 2700(2450) | 2600(2200) | 20,30 | A |
| LVH252A12-1R5□-N | 1.5 | 1MHz,200mV | 0.075 | 2200(1900) | 1900(1600) | 20,30 | I |
| LVH252A12-2R2□-N | 2.2 | 1MHz,200mV | 0.08 | 1900(1800) | 1800(1500) | 20,30 | B |
| LVH252A12-4R7□-N | 4.7 | 1MHz,200mV | 0.195 | 1200(1000) | 1100(930) | 20,30 | C |
| LVH252A12-100□-N | 10 | 1MHz,200mV | 0.4 | 900(800) | 800(680) | 20,30 | F |
| LVH252A12-330□-N | 33 | 1MHz,200mV | 1.55 | 430(380) | 380(340) | 20,30 | L |
| LVH252A12-470□-N | 47 | 1MHz,200mV | 1.7 | 390(350) | 340(300) | 20,30 | K |

NOTE: □-tolerance M=±20% / T=±30%

1. Operating temperature range - 55 °C ~ 125 °C (Including self - temperature rise)

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

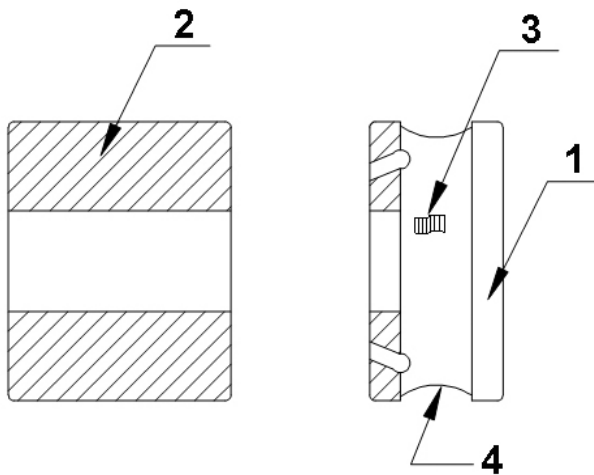
3. I rms for a 40°C temperature rise from 25°C ambient.

"-N" FOR COMPLETELY LEAD FREE TYPE(INCLUDING FERRITE BODY & SOLDER)

LVH252A12 Series Specification

8 LVH252A12 Series

8.1 Construction:



8.2 Material List:

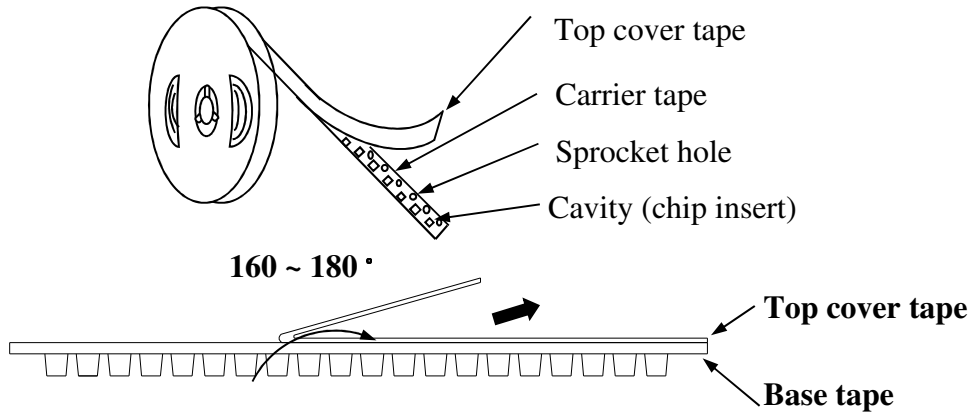
| No | Part | Material |
|----|----------|-----------------------|
| 1 | CORE | FERRITE |
| 2 | TERMINAL | Ag/Cu/Ni/Sn |
| 3 | WIRE | Grade 180 |
| 4 | EPOXY | Magnetic powder resin |

LVH252A12 Series Specification

9 Packaging:

9.1 Packaging -Cover tape

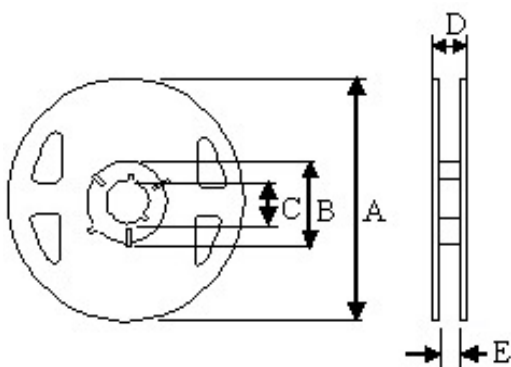
The force for tearing off cover tape is 10 to 100 grams in the arrow direction.



9.2 Packaging Quantity

| TYPE | PCS/REEL |
|-----------|----------|
| LVH252A12 | 2000 |

9.3 Reel Dimensions



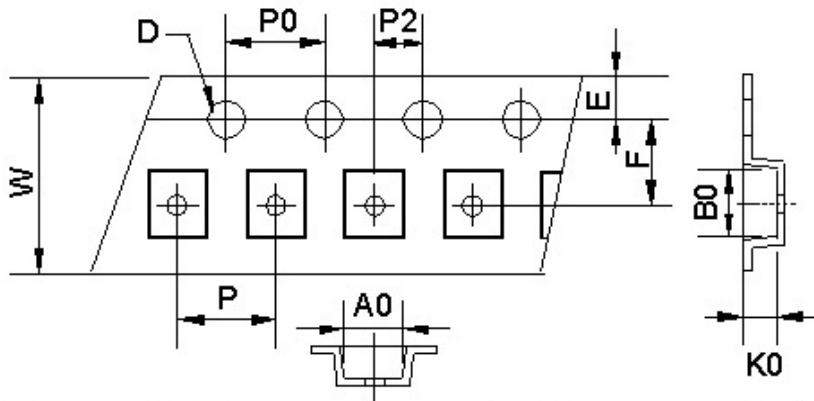
Dimensions in mm

| TYPE | A | B | C | D | E |
|------------|-----|----|----|------|-----|
| LVH252A 12 | 180 | 60 | 13 | 14.4 | 8.4 |

LVH252A12 Series Specification

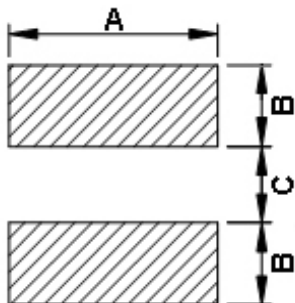
9 Packaging:

9.4 Tape Dimensions in mm



| TYPE | A0 | B0 | K0 | D | E | F | W | P | P0 | P2 |
|-----------|-----|------|------|------|------|-----|---|---|----|----|
| LVH252A12 | 2.4 | 2.75 | 1.35 | 1.55 | 1.75 | 3.5 | 8 | 4 | 4 | 2 |

10 Recommended Land Pattern:



Dimensions in mm

| TYPE | A | B | C |
|-----------|-----|------|-----|
| LVH252A12 | 2.2 | 0.85 | 0.8 |

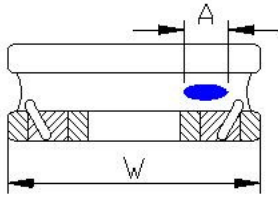
11 Note:

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.

LVH252A12 Series Specification

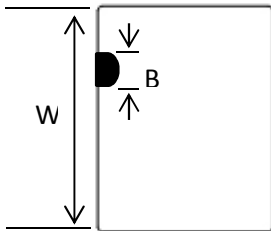
11 Note:

6. Void Appearance tolerance Limit



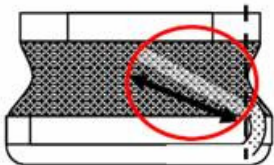
Exposed wire tolerance limit of coating resin part on product side.
The unilateral should be no more than two holes.

$$\begin{aligned} A &\leq W/2 \text{ GOOD} \\ A &> W/2 \text{ NG} \end{aligned}$$



The appearance standard of the chipping size in top side.

$$\begin{aligned} B &\leq W/5 \text{ GOOD} \\ B &> W/5 \text{ NG} \end{aligned}$$



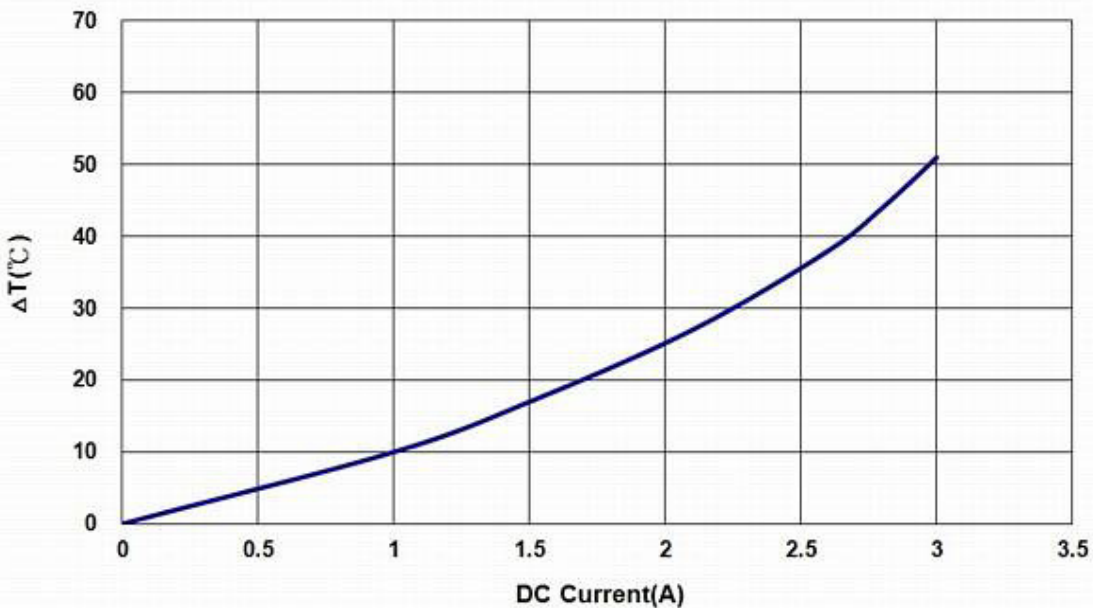
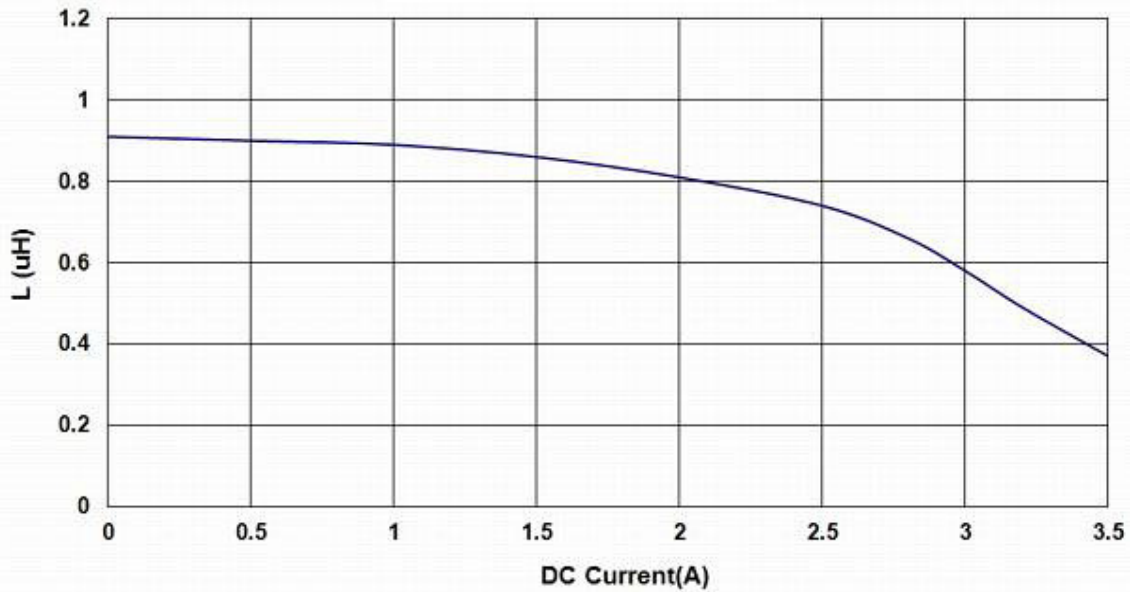
External appearance criterion for exposed wire

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



LVH252A12 Series Specification

12 Graph: LVH252A12-1R0M-N



Temperature test conditions:

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