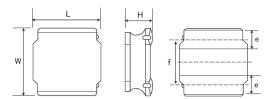
## **Spec Sheet**

Wire-wound Ferrite Power Inductors LSXB/LSXN/LSXP series for General Electronic Equipment

# LSXBD3030QKT150M (Previous PN: NR3015T150M)



#### Features

- Lifecycle Stage

- Item Summary 15uH±20%, 0.56A, 3.0x3.0x1.5mm
- Mass Production (Preferred)
- Standard packaging quantity (minimum)
   Taping Embossed 2000pcs

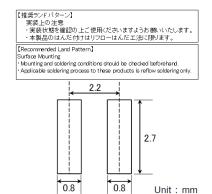
### Products characteristics table

Inductance	15 uH ± 20 %
Case Size (mm)	3.0x3.0
Rated Current (max)	0.56 A
Saturation Current (max)	0.56 A (⊿L=30%)
Temperature Rise Current (max)	0.56 A (⊿T=40℃)
DC Resistance (max)	0.432 Ω
DC Resistance (typ)	0.36 Ω
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min)	23 MHz
Operating Temp. Range	-25 to +120 ℃ (Including-self-generated heat)
Temperature characteristic (Inductance change)	± 20 %
RoHS Compliance (10 subst.)	Yes
REACH Compliance (223 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

### External Dimensions

Dimension L	3.0 ±0.1 mm
Dimension W	3.0 ±0.1 mm
Dimension H	Max 1.5 mm
Dimension e	0.9 ±0.2 mm
Dimension f	1.9 ±0.2 mm

## Recommended Land Patterns



2022.08.02

## LSXBD3030QKT150M



Dimension unit: mm unit: inch

Length: 3.0 +/- 0.1 (0.118 +/- 0.004)

Width: 3.0 +/- 0.1 (0.118 +/- 0.004)

Height: 1.5 max. (0.059 max.)

TAIYO YU

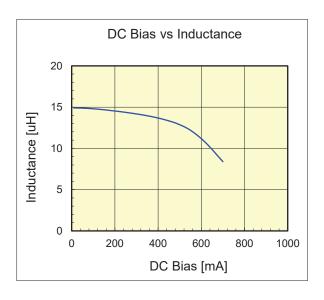
Inductance: 15 uH (test freq at 0.1MHz)

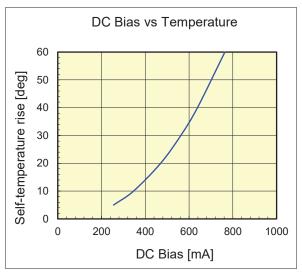
DC Resistance: 0.36 / 0.432 ohm (typ / max)

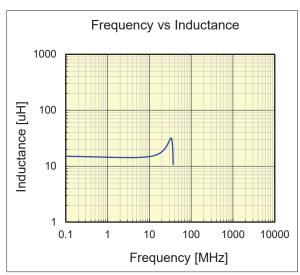
Saturation Current: 560 mA (max) Temp. rise Current: 560 mA (max)

Saturation current typical: 30% reduction from initial L value.

Temp rise Current typical: Temperature will rise by 40 deg C







Please read this notice before using the TAIYO YUDEN products.

#### **↑** REMINDERS

#### ■ Pre-Evaluation in the Actual Equipment and Conditions

Please conduct validation and verification of our products in actual conditions of mounting and operating environment before using our products.

#### ■ Limited Application

### 1. Equipment Intended for Use

Our products are intended for general-purpose and standard use in general electronic equipment for consumer (e.g., AV equipment, OA equipment, home electric appliances, office equipment, information and communication equipment including, without limitation, mobile phone, and PC) and other equipment specified in the product catalog or the individual product specification sheets, or the equipment approved separately by TAIYO YUDEN.

separately by TAIYO YUDEN.
TAIYO YUDEN has the product series intended for use in the following equipment. Therefore, when using our products for these equipment, please check available applications specified in the product catalog or the individual product specification sheets and use the corresponding products.

	Product Series		
Application	Equipment *1	Category (Part Number Code *2)	Quality Grade *3
Automotive	Automotive Electronic Equipment (POWERTRAIN, SAFETY)	Α	1
	Automotive Electronic Equipment (BODY & CHASSIS, INFOTAINMENT)	С	2
Industrial	Telecommunications Infrastructure and Industrial Equipment	В	2
Medical	Medical Devices classified as GHTF Class C (Japan Class III)	M	2
	Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)	L	3
Consumer	General Electronic Equipment	S	3

- \*Notes: 1. Based on the general specifications required for electronic components for such equipment, which are recognized by TAIYO YUDEN, the use of each product series for the equipment is recommended. Please be sure to contact TAIYO YUDEN before using our products for equipment other than those covered by the product series.
  - 2. On each of our part number, the 2nd code from the left is a code indicating the "Category" as shown in the above table. For details, please check the explanatory materials regarding the part numbering system of each of our products.
  - 3. Each product series is assigned a "Quality Grade" from 1 to 3 in order of higher quality. Please do not incorporate a product into any equipment with a higher Quality Grade than the Quality Grade of such product without the prior written consent of TAIYO YUDEN.

### 2. Equipment Requiring Inquiry

Please be sure to contact TAIYO YUDEN for further information before using our products for the following equipment (excluding intended equipment as specified in the product catalog or the individual product specification sheets) which may cause loss of human life, bodily injury, serious property damage and/or serious public impact due to a failure or defect of the products and/or malfunction attributed thereto.

- (1) Transportation equipment (automotive powertrain control system, train control system, and ship control system, etc.)
- (2) Traffic signal equipment
- (3) Disaster prevention equipment, crime prevention equipment
- (4) Medical devices classified as GHTF Class C (Japan Class III)
- (5) Highly public information network equipment, data-processing equipment (telephone exchange, and base station, etc.)
- (6) Any other equipment requiring high levels of quality and/or reliability equal to the equipment listed above

## 3. Equipment Prohibited for Use

Please do not incorporate our products into the following equipment requiring extremely high levels of safety and/or reliability.

- (1) Aerospace equipment (artificial satellite, rocket, etc.)
- (2) Aviation equipment \*
- (3) Medical devices classified as GHTF Class D (Japan Class IV), implantable medical devices \*2
- (4) Power generation control equipment (nuclear power, hydroelectric power, thermal power plant control system, etc.)
- (5) Undersea equipment (submarine repeating equipment, etc.)
- (6) Military equipment
- (7) Any other equipment requiring extremely high levels of safety and/or reliability equal to the equipment listed above
  - \*Notes: 1. There is a possibility that our products can be used only for aviation equipment that does not directly affect the safe operation of aircraft (e.g., in-flight entertainment, cabin light, electric seat, cooking equipment) if such use meets requirements specified separately by TAIYO YUDEN. Please be sure to contact TAIYO YUDEN for further information before using our products for such aviation equipment.
    - 2. Implantable medical devices contain not only internal unit which is implanted in a body, but also external unit which is connected to the internal unit.

#### 4. Limitation of Liability

Please note that unless you obtain prior written consent of TAIYO YUDEN, TAIYO YUDEN shall not be in any way responsible for any damages incurred by you or third parties arising from use of our products for any equipment that is not intended for use by TAIYO YUDEN, or any equipment requiring inquiry to TAIYO YUDEN or prohibited for use by TAIYO YUDEN as described above.

#### Safety Design

When using our products for high safety and/or reliability-required equipment or circuits, please fully perform safety and/or reliability evaluation. In addition, please install (i) systems equipped with a protection circuit and a protection device and/or (ii) systems equipped with a redundant circuit or other system to prevent an unsafe status in the event of a single fault for a failsafe design to ensure safety.

## ■ Intellectual Property Rights

Information contained in this spec sheet is intended to convey examples of typical performances and/or applications of our products and is not intended to make any warranty with respect to the intellectual property rights or any other related rights of TAIYO YUDEN or any third parties nor grant any license under such rights.

### **■** Limited Warranty

Please note that the scope of warranty for our products is limited to the delivered our products themselves conforming to the product specifications specified in the individual product specification sheets, and TAIYO YUDEN shall not be in any way responsible for any damages resulting from a failure or defect in our products. Notwithstanding the foregoing, if there is a written agreement (e.g., supply and purchase agreement, quality assurance agreement) signed by TAIYO YUDEN and your company, TAIYO YUDEN will warrant our products in accordance with such agreement, provided, however, that our products shall be used for general-purpose and standard use in the equipment specified in the product catalog or the individual product specification sheets.

## ■ TAIYO YUDEN's Official Sales Channel

The contents of this spec sheet are applicable to our products which are purchased from our sales offices or authorized distributors (hereinafter "TAIYO YUDEN's official sales channel"). Please note that the contents of this spec sheet are not applicable to our products purchased from any seller other than TAIYO YUDEN's official sales channel.

#### Caution for Export

Some of our products may require specific procedures for export according to "U.S. Export Administration Regulations", "Foreign Exchange and Foreign Trade Control Law" of Japan, and other applicable regulations. Should you have any questions on this matter, please contact our sales staff.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Power Inductors - SMD category:

Click to view products by Taiyo Yuden manufacturer:

Other Similar products are found below:

```
        IHLP1616BZRZR10ML1
        SPB1012-R15Y
        SPB1012-R13Y
        SRP2010DPA-1R0M
        SRP2010DPA-R56M
        IHHP0806ZHER2R2M01

        IHHP0805ZHER1R0M01
        IHHP0805ZHER1R0M01
        IHHP0805ZHER2R2M01
        SGIHLP73HFB100M81P

        SGIHLP73HFB2R2M81P
        SGIHLP73HFB330M81P
        IHLP6767GZER820M1A
        IDC5020ER681M
        SGIHLP73HFB3R3M81P

        SGIHLP48FAB100M81P
        SGIHLP60HEB1R2M81P
        SGIHLP97OZB2R2M81P
        SGIHLP41FAB2R2M81P
        IHLP1616ABRZ47NML1

        SGIHLP97OZB100M81P
        SGIHLP24DCB3R3M81P
        SGIHLP73HFB4R7M81P
        SGIHLP48FAB680M81P
        SGIHLP97OZB470M81P

        SGIHLP48FAB1R0M81P
        SGIHLP24DCBR68M81P
        SGIHLP60HEBR22M81P
        IHHP0603ZHERR47M01
        IHHP0806ZHERR47M01

        IHHP0805ZHERR47M01
        744760222A
        74408053004
        74408053330
        74408053100
        74408053220
        744760027A
        74439358150

        PLEA67BCA4R7M-1PT00
        VLBUC12060120R12LF3
        VLS5030EX-101M-D
        VLS5030EX-150M-D
        VLS5030EX-6R8M-D
        VLS5030EX-6R8M-D
        VLS5030EX-6R8M-D
        VLS5030EX-330M-D
        VLS5030EX-470M-D
        VLS5030EX-151M-D
```