



RM

COMPONENTS

**TAIYO YUDEN**

**POWER CHIP INDUCTORS**

Top Values

Automotive (A, c), Industrial (B),  
Medical (M, L), Consumer (S)

**big service on  
small products**

## Design-In Specialist for High-End Electronic Components

We are specialized in the distribution of **TAIYO YUDEN** (Japan) and **HolyStone** (Taiwan). We are the largest distribution partner in Europe for both manufacturers, maintaining the largest stock of components in Europe and supplying passive components for nearly all electronic applications. At the same time, we offer our customers extensive technical and logistical support, ensuring

a reliable supply of technically suitable components.

Our partner **TAIYO YUDEN** is a market leader in ceramic capacitors, inductors, and ferrites. They stand out from competitors through technological advancement, supply chain reliability, and a high degree of automation.

On the following pages, we have made a selection of components with top values, to introduce you to **TAIYO YUDEN**'s portfolio as a manufacturer of inductors and ferrites (intermediate sizes available for all series).

## Introduction of New Manufacturer Part Numbers (MPN)


**TAIYO YUDEN** has made changes to the part numbers of its products. The introduction of the new **Manufacturer Part Number (MPN)**

system ensures that all products can be selected for the correct target market and application. This new numbering system will

make it easier for you to order the correct parts for your application.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Product Group	Grade	Type	Characteristic																

Application	Product-Series		Quality Grade
	Field of Application	Grade	
Automotive	Automotive Electronic Equipment (POWERTRAIN, SAFETY)	A	1
	Automotive Electronic Equipment (BODY & CHASSIS, INFOTAINMENT)	C	2
Industrial	Telecommunications Infrastructure and Industrial Equipment	B	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

\* MPN = Manufacturer Part Number     = Placeholder for Grade

Example:

**L  RNJ10145GL**

Available in Grades C, B, M, L

This component is therefore available in the following variants/MPNs:

L **C** RNJ10145GL

L **B** RNJ10145GL

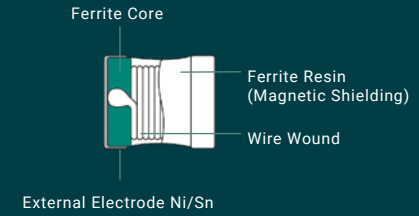
L **M** RNJ10145GL

L **L** RNJ10145GL

# Wire Wound Ferrite Core Chip Inductors

## The New L<sub>QB</sub>- & L<sub>QC</sub>-Series

- Previous MTB\*: LB-, CB Series
- Magnetic shielding through ferrite cover
- Volume is fully utilized
- High efficiency
- Full-surface terminal electrodes
- Mechanical protection
- Excellent noise suppression
- Operating temperature range: -40 to +105°C



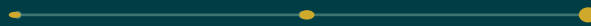
available in B, M, L, S

Size L x W x H (MPN old)	1.6 x 0.8 x 0.9 mm (LB1608)	2.0 x 1.6 x 1.8 mm (LB2016)	3.2 x 1.8 x 2.0 mm (LB3218)	1.6 x 0.8 x 1.0 mm (LBMF1608)	2.0 x 1.6 x 1.8 mm (LBC2016)	2.5 x 1.8 x 2.0 mm (LBC2518)	3.2 x 2.5 x 2.7 mm (LBC3225)
MPN new	<b>L<sub>QBA</sub>160808</b>	<b>L<sub>QBA</sub>201616</b>	<b>L<sub>QBA</sub>321818</b>	<b>L<sub>QBB</sub>160808</b>	<b>L<sub>QCA</sub>201616</b>	<b>L<sub>QCA</sub>251818</b>	<b>L<sub>QCA</sub>322525</b>
	1.0 μH – 10 μH 160 mA – 60 mA	1.0 μH – 100 μH 490 mA – 40 mA	1.0 μH – 1000 μH 1075 mA – 39 mA	1.0 μH – 47 μH 230 mA – 35 mA	1.0 μH – 100 μH 690 mA – 75 mA	1.0 μH – 680 μH 775 mA – 45 mA	1.0 μH – 100 μH 1.1 A – 150 mA

# MCOIL™ – Wire Wound Metal Core Power Chip Inductors

## L<sub>BHB</sub>-Series

- Previous MPN\*: MB Series
- Power-up to the L<sub>QB</sub>- & L<sub>QA</sub> Series
- Low RDC, high saturation current
- Excellent DC bias characteristics
- Operating temperature range: -40 to +125°C



available in L, S

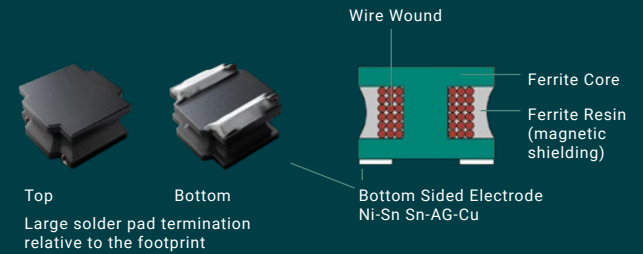
Size L x W x H (MPN old)	1.6 x 0.8 x 1.0 mm (MBKK1608)	2.0 x 1.25 x 1.0 mm (MBKK2012)	2.5 x 2.0 x 1.2 mm (MBMK2520)
MPN new	<b>L<sub>BHB</sub>1608KK</b>	<b>L<sub>BHB</sub>2012KK</b>	<b>L<sub>BHB</sub>2520MK</b>
	0.24 μH – 4.7 μH 1.65 A – 370 mA	0.24 μH – 4.7 μH 2.4 A – 600 mA	0.24 μH – 4.7 μH 3.5 A – 800 mA

# Ferrite Core Power Chip Inductors

## AEC-Q200 Qualified

### The New L<sub>X</sub>N<sub>D</sub>- & L<sub>X</sub>N<sub>H</sub>- (NRS), L<sub>X</sub>N<sub>E</sub>- (NRH), L<sub>X</sub>PD (NRV)-Series

- Previous MPN: NRS-, NRH-, NRV Series\*
- Space-saving
- Encapsulated with ferrite resin, providing magnetic shielding
- High current, low RDC
- Mechanical protection
- Resistant under temperature cycling
- Hard and resistant to vibration and bending due to the ferrite coating
- Our high runner
- Operating temperature range: -40 to +125°C



#### L<sub>X</sub>N<sub>D</sub>- & L<sub>X</sub>N<sub>H</sub>-Series

available in C, B, M, L, S

Size L x W x H (MPN old)	2.0 x 2.0 x 1.2 mm (NRS2012)	3.0 x 3.0 x 1.5 mm (NRS3015)	4.0 x 4.0 x 1.2 mm (NRS4012)	5.0 x 5.0 x 1.0 mm (NRS5010)	5.0 x 5.0 x 4.0 mm (NRS5040)	6.0 x 6.0 x 4.5 mm* (NRS6045)	8.0 x 8.0 x 3.0 mm (NRS8030)	8.0 x 8.0 x 4.0 mm (NRS8040)	8.0 x 8.0 x 4.2 mm (NRS8040)
<b>MPN new</b>	<b>L<sub>X</sub>N<sub>D</sub>2020MK</b>	<b>L<sub>X</sub>N<sub>D</sub>3030QK</b>	<b>L<sub>X</sub>N<sub>D</sub>4040MK</b>	<b>L<sub>X</sub>N<sub>D</sub>5050KK</b>	<b>L<sub>X</sub>N<sub>D</sub>5050YK</b>	<b>L<sub>X</sub>N<sub>D</sub>6060YE</b>	<b>L<sub>X</sub>N<sub>H</sub>8080XK</b>	<b>L<sub>X</sub>N<sub>H</sub>8080YK</b>	<b>L<sub>X</sub>N<sub>H</sub>8080YB</b>
	1 μH – 4.7 μH 1.7 A – 900 mA	1 μH – 47 μH 2.1 A – 325 mA	1 μH – 47 μH 2.2 A – 350 mA	1 μH – 22 μH 1.75 A – 450 mA	15 μH – 47 μH 1.8 A – 900 mA	1 μH – 100 μH 4.5 A – 750 mA	1 μH – 47 μH 6.2 A – 1.1 A	10 μH – 220 μH 3.1 A – 670 mA	0.9 μH – 6.8 μH 7.8 A – 3.7 A

#### L<sub>X</sub>N<sub>E</sub>-Series

available in C, B, M, L, S

Size L x W x H (MPN old)	2.4 x 2.4 x 1.0 mm (NRH2410)	2.4 x 2.4 x 1.2 mm (NRH2412)	3.0 x 3.0 x 1.0 mm (NRH3010)	3.0 x 3.0 x 1.2 mm (NRH3012)	2.0 x 2.0 x 1.0 mm (NRV2010)	2.0 x 2.0 x 1.2 mm (NRV2012)	3.0 x 3.0 x 1.2 mm (NRV3012)
<b>MPN new</b>	<b>L<sub>X</sub>N<sub>E</sub>2424KK</b>	<b>L<sub>X</sub>N<sub>E</sub>2424MK</b>	<b>L<sub>X</sub>N<sub>E</sub>3030KK</b>	<b>L<sub>X</sub>N<sub>E</sub>3030MK</b>	<b>L<sub>X</sub>PD2020KK</b>	<b>L<sub>X</sub>PD2020MK</b>	<b>L<sub>X</sub>PD3030MK</b>
	0.68 μH – 22 μH 1.57 A – 300 mA	0.47 μH – 10 μH 2.1 A – 450 mA	1.2 μH – 47 μH 1.48 A – 250 mA	0.47 μH – 47 μH 1.9 A – 280 mA	0.47 μH – 4.7 μH 2 A – 760 mA	1 μH – 4.7 μH 1.65 A – 750 mA	1 μH – 10 μH 1.6 A – 550 mA

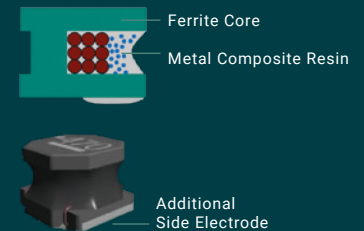
\* also available in H=1

# Ferrite Core & Metal Resin Power Chip Inductors – The Hybrids

## AEC-Q200 Qualified

### LXHF-Series

- Previous MPN: NRM Series\*
- Very robust
- Low RDC
- AOI possible due to extended side solder pads
- Small and low-profile
- Further improved DC Bias characteristics and higher saturation currents compared to the LXND Series (Previous MPN: NRS)
- Suitable for DC/DC converters
- Operating temperature range: -40 to +125°C



	available in C, B, M					
Size L x W x H (MPN old)	3.0 x 3.0 x 1.5 mm (NRM3015)	4.0 x 4.0 x 2.0 mm (NRM4020)	5.0 x 5.0 x 2.2 mm (NRM5020)	5.0 x 5.0 x 3.1 mm (NRM5030)	6.0 x 6.0 x 3.0 mm (NRM6030)	6.0 x 6.0 x 4.5 mm (NRM6045)
MPN new	<b>LXHF3030QK</b>	<b>LXHF4040WK</b>	<b>LXHF5050WB</b>	<b>LXHF5050XA</b>	<b>LXHF6060XA</b>	<b>LXHF6060YE</b>
	0.47 µH – 100 µH 3.1 A – 210 mA	1.0 µH – 220 µH 3.66 A – 330 mA	0.47 µH – 100 µH 6.0 A – 500 mA	0.47 µH – 470 µH 6.8 A – 250 mA	1.0 µH – 100 µH 5.8 A – 730 mA	1.0 µH – 470 µH 6.2 A – 380 mA

### LAXHG-Serie - For Automotive Powertrain And Safety

- Previous MPN: NRT Series\*
- Specifically designed for high-demand applications
- Same benefits as the LXHF Series
- Operating temperature range: -40 to +150°C

	available in A		
Size L x W x H (MPN old)	5.0 x 5.0 x 3.0 mm (NRT5030)	5.0 x 5.0 x 3.1 mm (NRT5030)	6.0 x 6.0 x 4.5 mm (NRT6045)
MPN new	<b>LAXHG5050XK</b>	<b>LAXHG5050XA</b>	<b>LAXHG6060YE</b>
	47 µH – 470 µH 850 mA – 250 mA	0.47 µH – 22 µH 6.8 A – 1.3 A	1.0 µH – 470 µH 6.2 A – 380 mA

# MCOIL™ – Metal Core Power Chip Inductors

## AEC-Q200 Qualified

### L■DND-Series

- Previous MPN: MD Series\*
- Metal core SMD power inductors
- Compact sizes and high currents
- Operating temperature range: -40 to +125°C



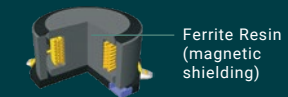
	available in C, B, M, L, S						
Size L x W x H (MPN old)	1.64 x 1.64 x 1.0 mm (MDKK1616)	2.0 x 2.0 x 1.0 mm (MDKK2020)	3.0 x 3.0 x 1.0 mm (MDKK3030)	2.0 x 2.0 x 1.2 mm (MDMK2020)	3.0 x 3.0 x 1.2 mm (MDMK3030)	4.0 x 4.0 x 1.2 mm (MDMK4040)	5.0 x 5.0 x 1.4 mm (MDPK5050)
MPN new	<b>L■DND1616KK</b>	<b>L■DND2020KK</b>	<b>L■DND3030KK</b>	<b>L■DND2020MK</b>	<b>L■DND3030MK</b>	<b>L■DND4040MK</b>	<b>L■DND5050PK</b>
	0.47 $\mu$ H – 15 $\mu$ H 1.5 A – 400 mA	0.47 $\mu$ H – 15 $\mu$ H 2.2 A – 480 mA	0.47 $\mu$ H – 10 $\mu$ H 3.9 A – 850 mA	0.47 $\mu$ H – 4.7 $\mu$ H 2.3 A – 950 mA	0.30 $\mu$ H – 4.7 $\mu$ H 5.5 A – 1.35 A	0.47 $\mu$ H – 10 $\mu$ H 4.6 A – 1.4 A	1 $\mu$ H – 10 $\mu$ H 4.3 A – 1.7 A

# High Power Chip Inductors

## AEC-Q200 Qualified

### L■RNJ-Series

- Previous MPN: NS Series\*
- High-current inductor with ferrite casing
- High saturation current and low RDC
- Magnetic shielding
- Applications:
  - Power supplies / DC-DC converters
  - LED backlight drivers, LCDs, and more
  - Operating temperature range: -40 to +125°C



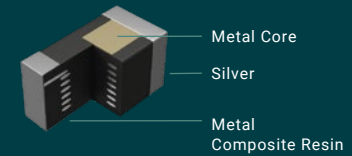
	available in C, B, M, L, S					
Size L x W x H (MPN old)	10.1 x 10.1 x 4.85 mm (NS10145)	10.1 x 10.1 x 5.85 mm (NS10155)	10.1 x 10.1 x 6.85 mm (NS10165)	12.5 x 12.5 x 5.85 mm (NS12555)	12.5 x 12.5 x 6.85 mm (NS12565)	12.5 x 12.5 x 7.5 mm (NS12575)
MPN new	<b>L■RNJ10145GL</b>	<b>L■RNJ10155GL</b>	<b>L■RNJ10165GL</b>	<b>L■RNJ12555GL</b>	<b>L■RNJ12565GL</b>	<b>L■RNJ12575GL</b>
	1.0 $\mu$ H – 1.5 mH 8.9 A – 270 mA	1.5 $\mu$ H – 22 $\mu$ H 8.39 A – 3.12 A	1.5 $\mu$ H – 22 $\mu$ H 8.04 A – 3.41 A	6.0 $\mu$ H – 1.5 mH 5.01 A – 400 mA	2.0 $\mu$ H – 220 $\mu$ H 7.6 A – 1.18 A	1.2 $\mu$ H – 1mH 9.15 A – 680 mA

# MCOIL™ – Metal Core Chip Inductors

AEC-Q200 Qualified (L■CNF only)

## L■CNB-, L■CNA- & L■CNF-Series – Smallest multilayer metal power chip inductors

- Previous MPN: MC Series\*
- Use of metallic and magnetic materials
- Perfect for noise suppression in power circuits
- Excellent DC bias characteristics
- Operating temperature range:  
L■CNB- & L■CNA Series -40 to +125°C
- Operating temperature range:  
L■CNF Series -55 to +150°C
- NEW: Grade A (Automotive Powertrain and Safety) with an operating temperature range of -55 to +165°C (available only in size 2.0 x 1.25 x 1.0 mm)



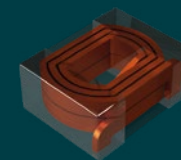
available in L, S						available in A, C, B, M		
Size L x W x H (MPN old)	1.0 x 0.5 x 0.55 mm (MCEE1005)	1.25 x 1.05 x 0.5 mm (MCEK1210)	1.6 x 0.8 x 0.8 mm (MCHK1608)	1.6 x 0.8 x 1.0 mm (MCKK1608)	2.0 x 1.25 x 1.0 mm (MCKK2012)	Size L x W x H (MPN old)	1.6 x 0.8 x 1.0 mm (MCKK1608)	2.0 x 1.25 x 1.0 mm (MCKK2012)
MPN new	L■CNB1005EE	L■CNB1210EK	L■CNB1608HK	L■CNB1608KK	L■CNA2012KK	MPN new	L■CNF1608KK	L■CNF2012KK
	0.1 μH – 1 μH 2.0 A – 800 mA	0.47 μH – 1.5 μH 1.6 A – 900 mA	0.24 μH – 2.2 μH 3.7 A – 1.2 A	0.24 μH – 1.0 μH 2.6 A – 1.3 A	0.24 μH – 1.0 μH 4.0 A – 2.1 A		0.24 μH – 0.56 μH 3.2 A – 2.3 A	0.24 μH – 1.0 μH 4.8 A – 2.7 A

# MCOIL™ – Wire Wound Metal Power Chip Inductors

AEC-Q200 Qualified

## L■EN-Series

- Previous MPN: MEKK Series\*
- Technical improvement of the magnetic core and the connection to the PCB (termination)
- Very high reliability and extended lifetime due to the use of new metal materials with high heat resistance
- Operating temperature range: -40 to +125°



available in C, B, M, L, S			Structure	Terminal
Size L x W x H (MPN old)	2.0 x 1.6 x 1.0 mm (MEKK2016)	2.5 x 2.0 x 1.0 mm (MEKK2520)	L■EN Bottom Sided Electrode	LCEN Automotive Electrodes On Five Sides
MPN new	L■ENC2016	L■ENC2520	One Sided Ag-Ni-Sn Electrode For High Density Mounting	Metal Resin Composite With Higher Heat Resistance Enamelled Flat Cu Wire Five Sided Ag-Ni-Sn Electrode
	0.24 μH – 2.2 μH 5.4 A – 1.9 A	0.33 μH – 4.7 μH 5.1 A – 1.5 A		

# Ferrite Beads / Chip Filter For Data Line And Power Supply

## High Current Up To 7.5 A Or High Impedance Up To 2.000 Ohm


### AEC-Q200 Qualified

#### L<sub>MC</sub>- & L<sub>MG</sub>-Series, Ferrite Beads for Noise Suppression


Complete value range available at RMC

- High current capacity
- High reliability
- Waveform correction of digital signals and suppression of high-frequency noise
- Operating temperature range: -40 to +125°C  
L<sub>AMG</sub>\_16808 for Automotive Powertrain and Safety: -40 to +150°C

available in C, B, M, L, S

High Current (A)				Over 1 A Line-up [A]							Impedance [Ω]
Components	MTB new	MTB old	Design Inch	1	2	3	4	5	6	7	
	L <sub>MC</sub> _160808	FBMJ1608	0603					4 – 7.5			18 – 28
	L <sub>MC</sub> _201208	FBMJ2125	0805					4 – 6			8 – 42
	L <sub>MC</sub> _321611	FBMJ3216	1206					4 – 6			16 – 80
	L <sub>MC</sub> _451611	FBMJ4516	1806				3.5 – 6				23 – 110

available in A, C, B, M, L, S

High Impedance (Ω)											Impedance [Ω]	
Components	MTB new	MTB old	Design Inch	1	2	3	4	5	6	7		
	L <sub>MG</sub> _160808	FBMH1608	0603		0.5 – 3.5							30 – 1000
	L <sub>MGA</sub> 201208	FBMH2012	0805			1.8 – 2.7						80 – 330
	L <sub>MGA</sub> 201616	FBMH2016	0806			2 – 4.5						120 – 250
	L <sub>MGA</sub> 321616	FBMH3216	1206			2 – 4						220 – 500
	L <sub>MGA</sub> 322525	FBMH3225	1210		1.2 – 3							600 – 2000
	L <sub>MGA</sub> 451616	FBMH4516	1806		1.5							850
	L <sub>MGA</sub> 452525	FBMH4525	1810			2 – 3						1000 – 1600
	L <sub>MGA</sub> 453232	FBMH4532	1812		1.3 – 4							680 – 2000