

# Wire-wound Ferrite Power Inductors LLXN/LLXP series

## for Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)

Code in front of Series have been extracted from Part number, which describes the segment of products, such as kinds and characteristics.

REFLOW

PART NUMBER

\* Operating Temp.: -25~+120°C (LLXN 4040/5050/6060/8080: -25~+125°C) (Including self-generated heat)

L	L	X	N	D	4	0	4	0	K	K	L	1	0	0	M	D	G
①	②	③	④	⑤	⑥	⑦	⑧										

## ① Series

Code (1)(2)(3)(4)	
LLXN	Wire-wound Ferrite Power Inductor for Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)
LLXP	Wire-wound Ferrite Power Inductor for Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)

## (1) Product Group

Code	
L	Inductors

## (2) Category

Code	Recommended equipment	Quality Grade
L	Medical Devices classified as GHTF Classes A or B (Japan Classes I or II)	3

## ② Features

Code	Feature
D	Bottom electrode (Ag × solder)
E	Bottom electrode (Cu × solder)
H	Bottom electrode (Frame type)

## ③ Dimensions (L × W)

Code	Dimensions (L × W) [mm]
2020	2.0 × 2.0
2424	2.4 × 2.4
3030	3.0 × 3.0
4040	4.0 × 4.0
5050	5.0 × 5.0
6060	6.0 × 6.0
8080	8.0 × 8.0

## ④ Dimensions (H)

Code	Dimensions (H) [mm]
KK	1.0
MK	1.2
PK	1.4
QK	1.5
TK	1.8
WK	2.0
WD	2.4
WE	2.5
WH	2.8
XK	3.0
XA	3.1
YK	4.0
YA	4.1
YB	4.2
YE	4.5

## (3) Type

Code	
X	Ferrite Wire-wound (Drum type)

## (4) Features, Characteristics

Code	
N	Standard Power choke
P	High current power choke

## ⑤ Packaging

Code	Packaging
T	Taping
L	Taping

## ⑥ Nominal inductance

Code (example)	Nominal inductance [μH]
2R2	2.2
100	10
101	100

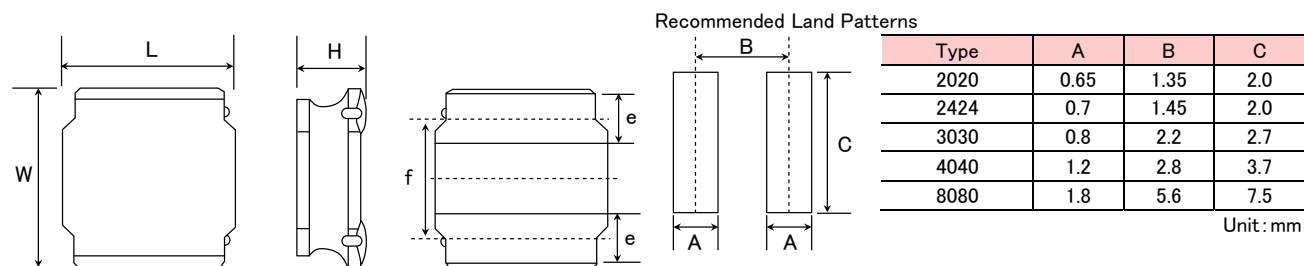
※R=Decimal point

## ⑦ Inductance tolerance

Code	Inductance tolerance
M	±20%
N	±30%

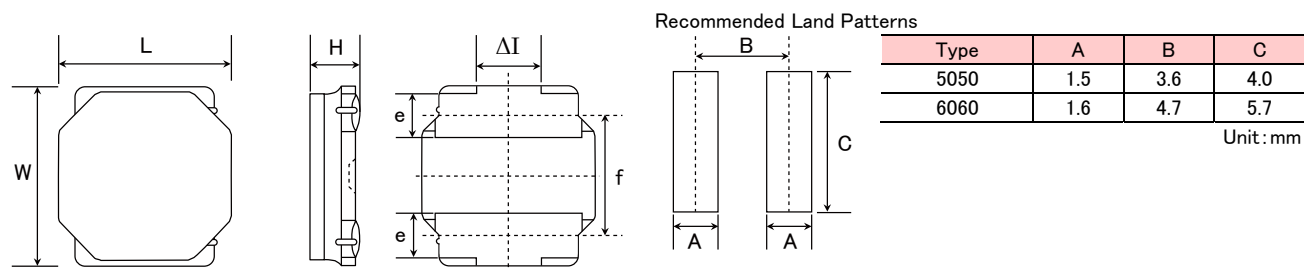
## ⑧ Internal code

## STANDARD EXTERNAL DIMENSIONS / STANDARD QUANTITY



Type	L	W	H	e	f	Standard quantity [pcs] Taping
2020KK	2.0±0.1 (0.079±0.004)	2.0±0.1 (0.079±0.004)	1.0 max (0.039 max)	0.5±0.2 (0.020±0.008)	1.25±0.2 (0.050±0.008)	2500
2020MK	2.0±0.1 (0.079±0.004)	2.0±0.1 (0.079±0.004)	1.2 max (0.047 max)	0.5±0.2 (0.020±0.008)	1.25±0.2 (0.050±0.008)	2500
2424KK	2.4±0.1 (0.095±0.004)	2.4±0.1 (0.095±0.004)	1.0 max (0.039 max)	0.6±0.2 (0.024±0.008)	1.45±0.2 (0.057±0.008)	2500
2424MK	2.4±0.1 (0.095±0.004)	2.4±0.1 (0.095±0.004)	1.2 max (0.047 max)	0.6±0.2 (0.024±0.008)	1.45±0.2 (0.057±0.008)	2500
3030KK	3.0±0.1 (0.118±0.004)	3.0±0.1 (0.118±0.004)	1.0 max (0.039 max)	0.9±0.2 (0.035±0.008)	1.9±0.2 (0.075±0.008)	2000
3030MK	3.0±0.1 (0.118±0.004)	3.0±0.1 (0.118±0.004)	1.2 max (0.047 max)	0.9±0.2 (0.035±0.008)	1.9±0.2 (0.075±0.008)	2000
3030QK	3.0±0.1 (0.118±0.004)	3.0±0.1 (0.118±0.004)	1.5 max (0.059 max)	0.9±0.2 (0.035±0.008)	1.9±0.2 (0.075±0.008)	2000
4040KK	4.0±0.2 (0.158±0.008)	4.0±0.2 (0.158±0.008)	1.0 max (0.039 max)	1.1±0.2 (0.043±0.008)	2.5±0.2 (0.098±0.008)	5000
4040MK	4.0±0.2 (0.158±0.008)	4.0±0.2 (0.158±0.008)	1.2 max (0.047 max)	1.1±0.2 (0.043±0.008)	2.5±0.2 (0.098±0.008)	4500
4040TK	4.0±0.2 (0.158±0.008)	4.0±0.2 (0.158±0.008)	1.8 max (0.071 max)	1.1±0.2 (0.043±0.008)	2.5±0.2 (0.098±0.008)	3500
8080XK	8.0±0.2 (0.315±0.008)	8.0±0.2 (0.315±0.008)	3.0 max (0.118 max)	1.60±0.3 (0.063±0.012)	5.6±0.3 (0.22±0.012)	1000
8080YK	8.0±0.2 (0.315±0.008)	8.0±0.2 (0.315±0.008)	4.0 max (0.158 max)	1.60±0.3 (0.063±0.012)	5.6±0.3 (0.22±0.012)	1000
8080YB	8.0±0.2 (0.315±0.008)	8.0±0.2 (0.315±0.008)	4.2 max (0.165 max)	1.60±0.3 (0.063±0.012)	5.6±0.3 (0.22±0.012)	1000

Unit: mm (inch)



Type	L	W	H	e	f	$\Delta I$	Standard quantity [pcs] Taping
5050KK	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	1.0 max (0.039 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	1000
5050MK	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	1.2 max (0.047 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	1000
5050PK	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	1.4 max (0.055 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	1000
5050WK	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	2.0 max (0.079 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	800
5050WD	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	2.4 max (0.095 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	2500
5050WE	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	2.5 max (0.098 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	2500
5050XK	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	3.0 max (0.118 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	500
5050XA	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	3.1 max (0.122 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	500
5050YK	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	4.0 max (0.158 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	1500
5050YA	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	$4.9 \pm 0.2$ ( $0.193 \pm 0.008$ )	4.1 max (0.161 max)	$1.2 \pm 0.2$ ( $0.047 \pm 0.008$ )	$3.3 \pm 0.2$ ( $0.130 \pm 0.008$ )	1.3typ (0.051typ)	1500
6060KK	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	1.0 max (0.039 max)	$1.35 \pm 0.2$ ( $0.053 \pm 0.008$ )	$4.0 \pm 0.2$ ( $0.158 \pm 0.008$ )	2.3typ (0.091typ)	1000
6060MK	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	1.2 max (0.047 max)	$1.35 \pm 0.2$ ( $0.053 \pm 0.008$ )	$4.0 \pm 0.2$ ( $0.158 \pm 0.008$ )	2.3typ (0.091typ)	1000
6060PK	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	1.4 max (0.055 max)	$1.35 \pm 0.2$ ( $0.053 \pm 0.008$ )	$4.0 \pm 0.2$ ( $0.158 \pm 0.008$ )	2.3typ (0.091typ)	1000
6060WK	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	2.0 max (0.079 max)	$1.35 \pm 0.2$ ( $0.053 \pm 0.008$ )	$4.0 \pm 0.2$ ( $0.158 \pm 0.008$ )	2.3typ (0.091typ)	2500
6060WH	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	2.8 max (0.110 max)	$1.35 \pm 0.2$ ( $0.053 \pm 0.008$ )	$4.0 \pm 0.2$ ( $0.158 \pm 0.008$ )	2.3typ (0.091typ)	2000
6060YE	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	$6.0 \pm 0.2$ ( $0.236 \pm 0.008$ )	4.5 max (0.177 max)	$1.35 \pm 0.2$ ( $0.053 \pm 0.008$ )	$4.0 \pm 0.2$ ( $0.158 \pm 0.008$ )	2.3typ (0.091typ)	1500

Unit: mm (inch)